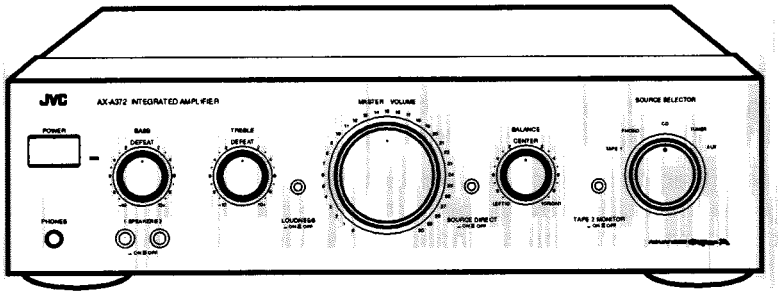
JVC

SERVICE MANUAL

INTEGRATED AMPLIFIER

AX-A372BK



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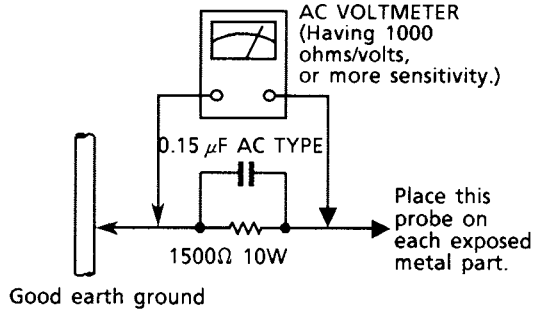
No. 20491
Jun. 1994

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

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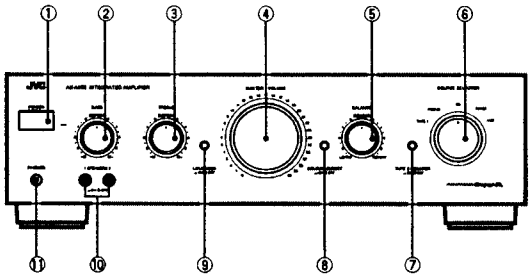
Description of Parts

This section describes the names of the buttons, dials and other parts used during the operation of the amplifier. The page number following each part indicates where detailed explanations are to be found.



① POWER switch
② BASS dial (p. 10)
③ TREBLE dial (p. 10)
④ MASTER VOLUME dial (p. 9)
⑤ BALANCE dial (p. 10)
⑥ SOURCE SELECTOR dial (p. 8)
⑦ TAPE 2 MONITOR button (p. 8)
⑧ SOURCE DIRECT button (p. 10)
⑨ LOUDNESS button (p. 10)
⑩ SPEAKERS 1 and 2 buttons (p. 9)
⑪ PHONES jack (p. 9)

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Getting Ready

This section describes how to get ready to use your amplifier for the first time, such as connecting other stereo components and speakers, and connecting the power supply.

Connecting Stereo Components to Amplifier

Confirming Right (Red) and Left (White) Channels

When connecting any stereo components to your amplifier, make sure that their left and right channels are connected properly to the left-channel and right-channel jacks of the amplifier, respectively. If they are reversed, the correct stereophonic image will not be generated.

Note: The right and left channels are normally represented by the colors red and white, respectively. Ensure correct connections by matching the colors of the plugs with the jacks.

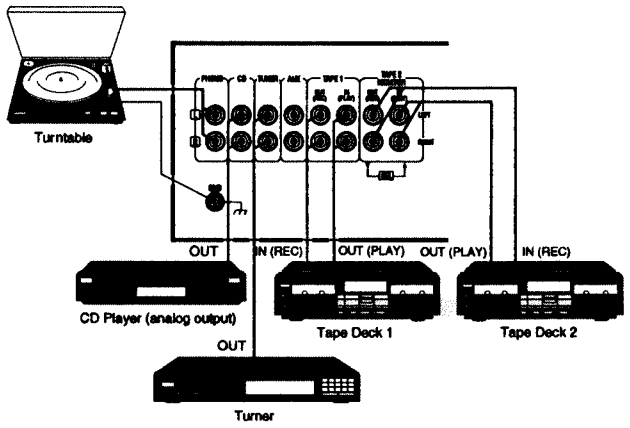
Making Basic Connections

Use RCA PIN plugs when connecting stereo components to the amplifier.
When connecting a tape deck to the amplifier, make the cable connections as follows:

TAPE DECK	(cable)	AMPLIFIER
Output jack	◄——►	TAPE 1, 2: IN (PLAY) jack
Input jack	◄——►	TAPE 1, 2: OUT (REC) jack

Notes:

- *When connecting a TV receiver (with audio jacks) or stereo components other than those listed below, use the AUX jacks. A turntable, however, cannot be connected to these jacks.*
- *If you have a turntable in your audio system, connect a ground cable (if fitted) to the GND screw on the rear panel of the amplifier.*
- *If you want to use a turntable with a small-output cartridge, such as the MC (moving-coil) type, you must use a commercial head amplifier or a step-up transformer before connecting it to the amplifier. A direct connection may result in insufficient volume.*



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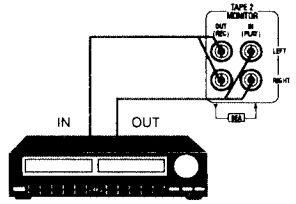
Connecting a Graphic Equalizer

You may connect a graphic equalizer to the amplifier instead of a second tape deck (TAPE 2). We recommend the use of JVC's S.E.A. graphic equalizer.
When connecting a graphic equalizer to the amplifier, make the cable connections as follows:

GRAPHIC EQUALIZER	(cable)	AMPLIFIER
Output jack	◄——►	TAPE 2 MONITOR: IN (PLAY) jack
Input jack	◄——►	TAPE 2 MONITOR: OUT (REC) jack



Graphic Equalizer

Note: For details on listening to a graphic equalizer, refer to P.10 ("Using Graphic Equalizer").

Connecting Speakers to Amplifier

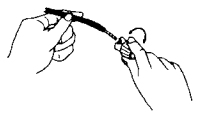
Confirming Proper Speaker Impedance

You may connect up to two sets of speakers to the amplifier (four speakers in total).

Note: Make sure to select speakers with the proper impedance: from 4Ω to 16Ω (ohms). If you use two sets of speakers at once, the minimum allowable impedance is 8Ω.

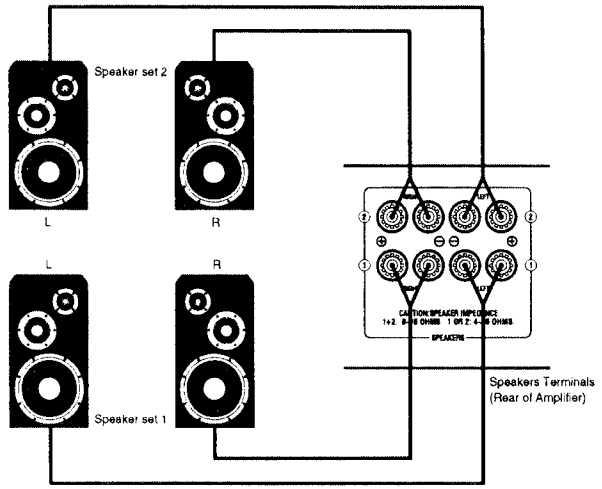
Connecting Speakers to Amplifier

Use the following procedure to connect the speaker cables to the SPEAKER terminals in the rear of the amplifier. Connect each cable separately.



1) Loosen the screw on the terminal by turning it counterclockwise.
2) Insert the speaker cable into the terminal, as illustrated.
3) Tighten the screw on the terminal by turning it clockwise to fasten the speaker cables.
4) Repeat steps 1-3 for the other speaker cables.

If you are connecting two sets of speakers to the amplifier, connect the first (main) pair of speakers to the bottom row of SPEAKERS terminals and the second set to the top row. Make the cable connections as follows:



Note: Make sure to match the polarity of the terminals on the speaker with that of the terminals on the amplifier; i.e., (+) to (+) and (–) to (–).

Connecting Power Supply

Setting Proper Voltage

Depending on the region where the amplifier is bought, a voltage selector switch may be included in the rear of the amplifier, as illustrated.
If your amplifier includes this switch, make sure that it is set at the proper voltage for your region. If adjustment is needed, turn the switch using a Philips (+) screwdriver, aligning the desired voltage with the arrow in the LINE ⬇ VOLTS message.

Note: The voltage selector switch is not provided on the European model.

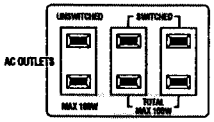
⚠CAUTION Incorrect setting of the voltage selector switch may cause malfunction or damage. Make sure that the voltage selector switch is set correctly before connecting the power supply.

Connecting Power Supply

After checking all the cable connections and the voltage selector switch, insert the power cord of the amplifier into an outlet.

⚠CAUTION Never handle the power cord with wet hands.

Using Outlets in Rear of Amplifier



The rear of the amplifier may contain one unswitched and two switched outlets on the right (as seen from the rear) that can be used to plug in the power cords of other components in your stereo system.

Note: Outlets are not provided on the European model.

With the switched outlet when you turn on the amplifier, power will be supplied to these outlets. If the connected components have been previously turned on, turning the amplifier's power on will cause these components to turn on as well. With the switch outlets, however, you cannot turn on the connected equipment when the amplifier is turned off.
The unswitched outlet provides power whenever the amplifier is plugged in, even when the amplifier is turned off.

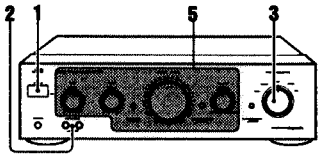
⚠CAUTION Do not connect components requiring a capacity greater than the indicated maximum (100W for the unswitched outlet, and 100W combined for the two switched outlets).

Basic Operation

This section describes the procedure to be taken when using the amplifier to listen to a particular source.

Operating Procedure

Use the following procedure to listen to a particular source using the amplifier. More detailed procedures are explained on the pages indicated.



1. Turn Power On

Press the POWER switch on the amplifier to turn it on.
The indicator next to the switch will light up.

2. Select Speakers or Headphones (p. 9)

Use the SPEAKERS (1 or 2) buttons to select the set of speakers that you want to listen to. If no button is pressed, no sound will come from the speakers.
If you want to use headphones, insert their plug in the PHONES jack on the bottom left of the front of the amplifier.

Note: If one or both of the SPEAKERS buttons are pressed, the speakers will still emit sound when the headphones are used.

3. Select Listening/ Recording Source (p. 8)

Select the source to listen to by turning the SOURCE SELECTOR dial on the amplifier (press the TAPE 2 MONITOR button for the second tape deck (TAPE 2).

4. Operate Source Equipment

Follow the directions for operating source equipment as printed in their respective instruction manuals.

5. Adjust Volume, Tone, and Balance (pp. 9, 10)

To adjust the volume, turn the MASTER VOLUME dial on the amplifier.
To adjust the bass or treble levels, turn the BASS or TREBLE dial, respectively, on the amplifier. When the volume is low, press the LOUDNESS button on the amplifier to compensate for human hearing capacities at certain frequencies. To adjust the balance between left and right speakers, turn the BALANCE dial.

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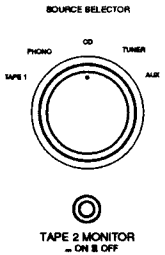
Selecting Source

This section describes how to select the source for listening or recording from the various stereo components connected to the amplifier.

Selecting Source for Listening



Turn the SOURCE SELECTOR dial on the amplifier to one of the listening sources as described below.

TAPE 1:	Select this to listen to a cassette in the tape deck connected to TAPE 1.
PHONO:	Select this to listen to a record.
CD:	Select this to listen to a CD.
TUNER:	Select this to listen to the radio.
AUX:	Select this to listen to the component connected to the AUX jack of the amplifier.

To listen to the second tape deck (connected to the TAPE 2 jack), press the TAPE 2 MONITOR button.

Selecting Source for Recording

To select the source for recording, use the SOURCE SELECTOR dial on the amplifier. Output will be made through the output jacks of both TAPE 1 and TAPE 2. However, the following combinations cannot be used:

INPUT		OUTPUT
TAPE 1	—×→	TAPE 1
TAPE 2	—×→	TAPE 1
TAPE 2	—×→	TAPE 2

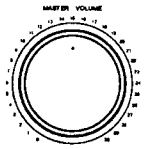
***Note:** To dub from one cassette tape to another, place the source cassette in the first tape deck (TAPE 1) and a blank cassette in the second one (TAPE 2), set the SOURCE SELECTOR dial on TAPE 1, and record with the second tape deck.*

Adjusting Volume, Balance and Tone (and Loudness)

This section describes how to adjust the volume, balance, tone and loudness settings when listening to the selected source.

Adjusting Volume and Selecting Speakers

Adjusting Volume



The MASTER VOLUME dial on the amplifier is used to adjust the volume levels of the speakers and headphones. Turn the dial clockwise to raise the volume and counterclockwise to lower it. Both left and right channels are adjusted simultaneously and to the same degree.

***Note:** Adjusting the MASTER VOLUME dial has no effect on the recording level used for recording output.*

Selecting Speakers

The SPEAKERS 1 and 2 buttons on the amplifier are used to select which set of speakers to listen from. You may also listen to both sets of speakers, if desired, or none at all. Use the guide below to determine the listening arrangement.

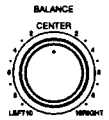
BUTTONS PRESSED	SPEAKER SET HEARD
1	1
2	2
1 & 2	1 & 2
none	none (headphones only)

Listening to Headphones

Insert the headphones into the PHONES jack under the POWER switch on the front of the amplifier. To listen to only the headphones and not the speakers, makes sure that both SPEAKERS 1 and 2 buttons are in the up (deactivated) position.

Adjusting Balance and Tone (and Loudness)

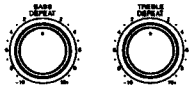
Adjusting Left/Right Balance



The BALANCE dial on the amplifier is used to control the relative sound of the left and right channels. Turn it to the left as far as necessary to shift the balance of the sound to the left, and to the right to shift the balance of the sound to the right.

Note: The balance of the headphone sound will also be affected. (These settings do not affect the recording output.)

Adjusting Bass and Treble Levels



The BASS dial and TREBLE dial on the amplifier are used to adjust the level of low and high frequencies, respectively. Turn either or both of the dials clockwise to intensify the respective settings, and counterclockwise to lower them.

Notes:

- *Leave the dial settings at DEFEAT to leave the bass and/or treble settings unchanged.*
- *The headphone sound will also be affected. (These settings do not affect the recording output.)*

Using Loudness Function at Low Volume Levels

The LOUDNESS button is used to switch the loudness function on or off. This function is useful at low volume levels, boosting lower and higher frequencies as our ears are not so sensitive to them when the volume is kept low. Press the button to turn on the loudness function (button down), and press it again to turn it off (button up).

Using Graphic Equalizer

If you have connected a graphic equalizer (JVC's S.E.A. is recommended) to the TAPE 2 MONITOR jacks in the rear of the amplifier, you can make finer adjustments to various frequency levels. To listen to sound processed by the graphic equalizer, turn the SOURCE SELECTOR dial to the desired source, and press the TAPE 2 MONITOR button on the amplifier.

Minimizing Sound Processing (Source Direct)

Using Source Direct Function

The SOURCE DIRECT button is used to shorten the circuit route taken by the sound signal during processing, resulting in more realistic sound reproduction. Press this button to enable this function (button down), and once again to disable it (button up).

Note: The BALANCE, BASS and TREBLE dials cannot be used when the SOURCE DIRECT function is turned on. The volume may be adjusted, however.

Troubleshooting

PROBLEM	POSSIBLE CAUSE(S)	ACTION(S)
Amplifier does not play.	Power cord not plugged in.	Plug power cord in AC outlet.
No sound heard from any speakers.	SPEAKERS button(s) not pressed, or SOURCE SELECTOR dial set incorrectly.	Press SPEAKERS button(s), or turn SOURCE SELECTOR dial to desired source.
Sound heard from only one speaker.	Speaker cables not connected properly, or BALANCE dial turned all the way to right or left.	Check speaker cables and reconnect if necessary, or adjust BALANCE dial so both speakers emit sound.
Speakers howl when record is played.	Turntable too close to speaker(s).	Move turntable away from speakers.

Specifications

Model Name	JVC AX-A372BK Integrated Amplifier
Output Power	
(IEC 268-3/DIN):	60W per channel into 4Ω at 1kHz with maximum 0.7% total harmonic distortion. 45W per channel into 8Ω at 1kHz with maximum 0.7% total harmonic distortion.
(JVC Audio Analysis System):	40W per channel, min. RMS, with both channels driven into 8Ω from 20Hz to 20kHz with maximum 0.007% total harmonic distortion.
Total Harmonic Distortion	
All sources exc. PHONO in, SPEAKERS out:	0.003%* at 40W (at 1kHz, 8Ω loaded) 0.007%* at 40W (from 20Hz to 20kHz, 8Ω loaded)
PHONO in, SPEAKERS out:	0.05%* at 40W (from 20Hz to 20kHz, 8Ω loaded, -30dB volume)
Damping Factor:	70 (at 1kHz, 8Ω loaded)
Power Bandwidth:	5Hz to 50kHz (IHF, both channels driven into 8Ω, no more than 0.05% total harmonic distortion)
Signal-to-Noise Ratio ('66 IHF/DIN)	
All sources exc. PHONO:	106dB/73dB
PHONO:	75dB/72dB
Input Sensitivity/Impedance (1kHz)	
All sources exc. PHONO:	200mV/27kΩ
PHONO:	2.5mV/47kΩ
Output Level/Impedance (1kHz)	
TAPE 1, TAPE 2 MONITOR:	200mV/450Ω
Tone Control Range	
BASS:	±8dB at 100Hz
TREBLE:	±8dB at 10kHz
LOUDNESS (-30dB volume):	+6dB at 100Hz, +4dB at 10kHz
Frequency Response (8Ω):	5Hz to 100kHz (+0dB, -3dB)
PHONO Overload Capacity (PHONO in, TAPE 2 MONITOR out)	
MM:	90mV (maximum 0.02% total harmonic distortion)
RIAA Phono Equalization	
MM:	±0.3dB (from 20Hz to 20kHz)
Power Requirements/Consumption	
Continental Europe:	AC 230V, 50Hz/155W
U.K.:	AC 240V, 50Hz/150W
Other Areas:	AC 110/127/220/240V switchable, 50/60Hz/155W
Dimensions:	435mm (W) × 127mm (H) × 308.5mm (D) (17-3/16in × 5in × 12-3/16in)
Weight:	6.9kg (15.3lbs)

** Measured by JVC Audio Analysis System*

Note: Designs and specifications are subject to change without notice.

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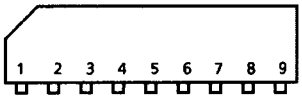
AX-S372BK

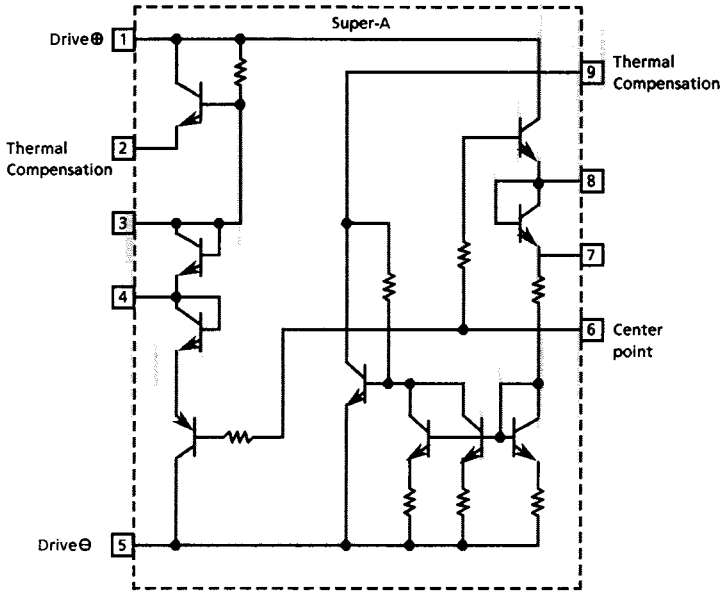
Description of Major LSIs

■ VC5022-2 (IC501,502) : SUPER A.

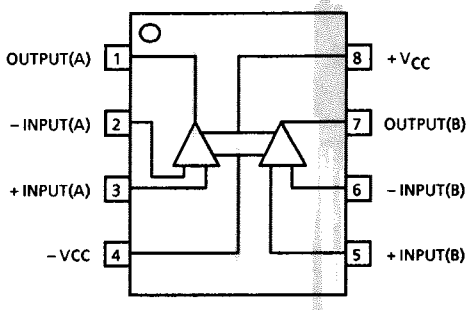
(1) Terminal Layout



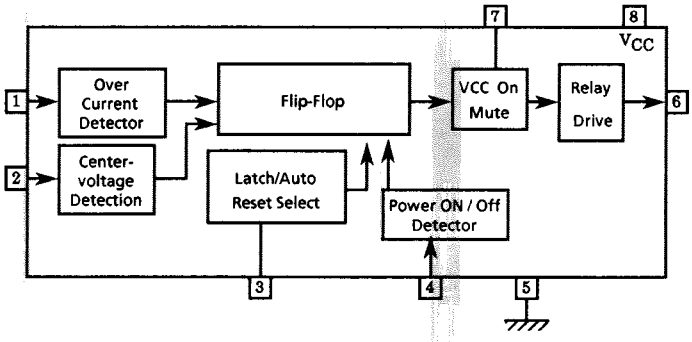
(2) Block Diagram



■ VC4580DD (IC101)
: Low noise Dual op Amp.



■ μPC1237HA (IC 901) : Protector, Relay Driver.



Disassembly Procedures

1. Removing the Top Cover

1) Remove the 4 screws fastening both sides of the Top Cover, and the 2 screws fastening the rear sides.
2) Remove the Top Cover.

2. Removing the Front Panel

1) Remove the 3 screws Ⓐ fastening top of the Front Panel.
2) Remove the 4 screws Ⓘ fastening bottom of the Front Panel.
3) Remove the Metals Front Panel.
4) Remove the 5 knob (MASTER VOLUME, SOURCE SELECTOR etc.).
5) Remove the 5 nut Ⓑ and 5 screws Ⓒ.
6) Remove the hooks Ⓗ holding the bracket.
7) Remove the Front Base.
8) Remove the 2screws Ⓖ fastening the Power SW.

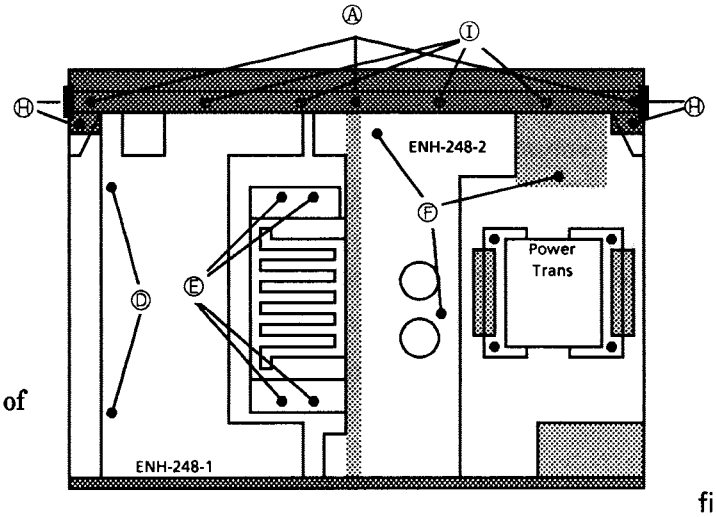


fig-1

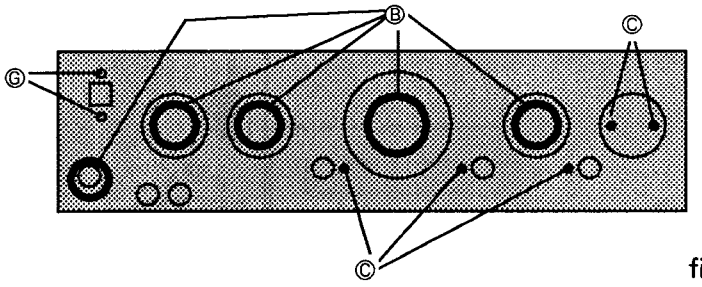


fig-2

3. Service procedures of Main PCB

1) Remove the 9 screws Ⓓ,Ⓔ and Ⓕ on the Main PCB..
2) Remove the 4 screws fastening the Trans.
3) Remove the 6 screws Ⓘ.
4) Separate the Main PCB with the front panel, rear panel and trans from the chassis base as shown in fig-4.

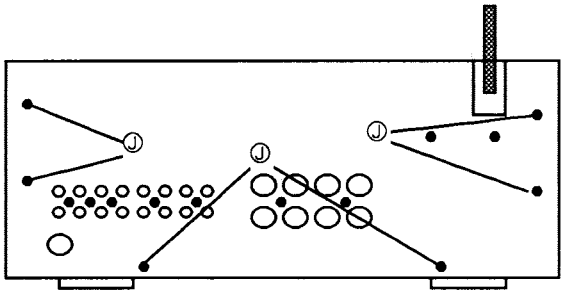


fig-3

(NOTE)

Take care not to short-circuit the filter condenser C811 and C812.

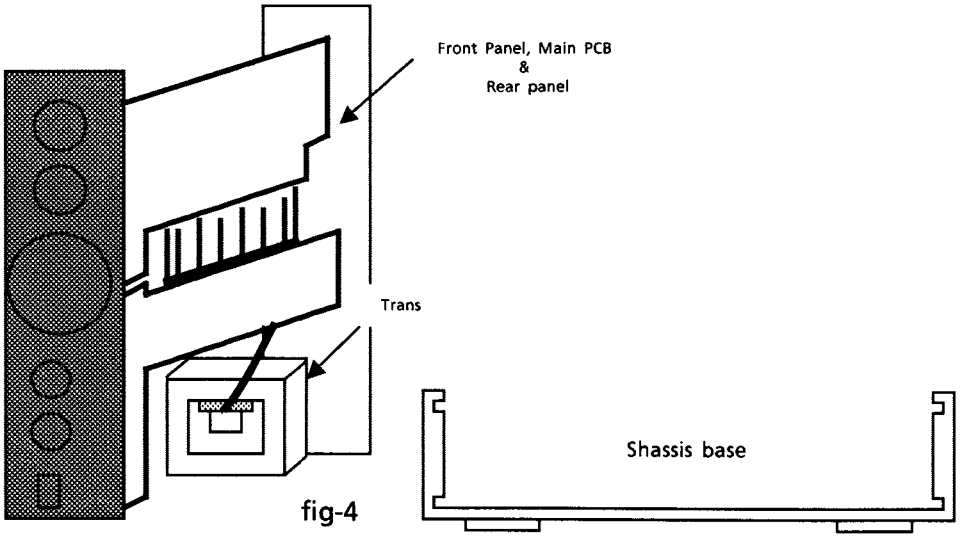
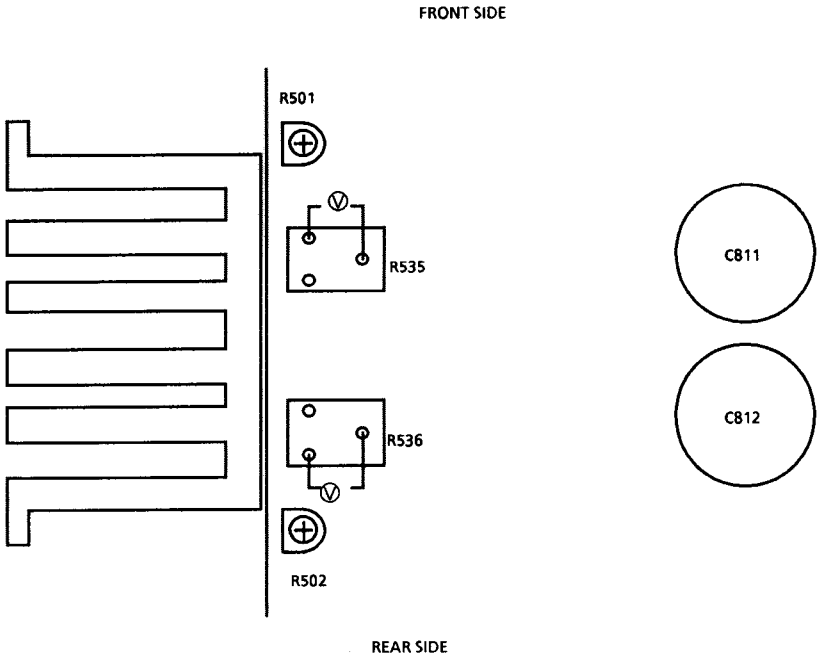


fig-4

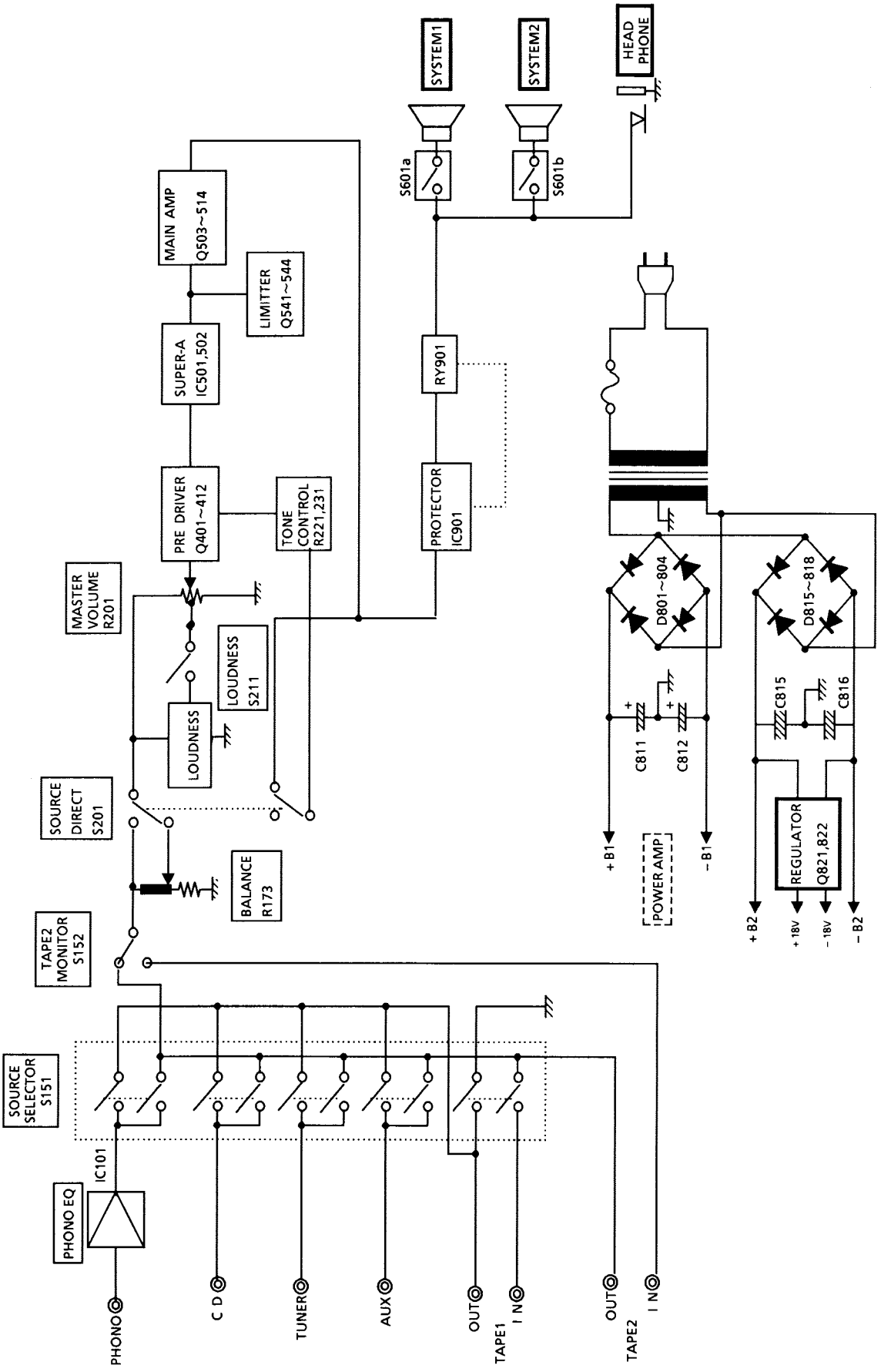
Power Amplifier Adjustment Procedures

■ *Idling Current*

1) Set the volume control to minimum during this adjustment.
2) Turn R501 and R502 fully counterclockwise before the power switch on.
3) Always start from cold, and allow 15 minutes to warm up before adjustment. If the heatsink is already warm from previous use the correct adjustment can not be made.
4) Connect a DC voltmeter to R535 resistor's leads for left channel, or to R536 for right channel.
5) Adjust R501 for left channel, or R502 for right channel, so that the DC voltmeter becomes 7mV~13mV .

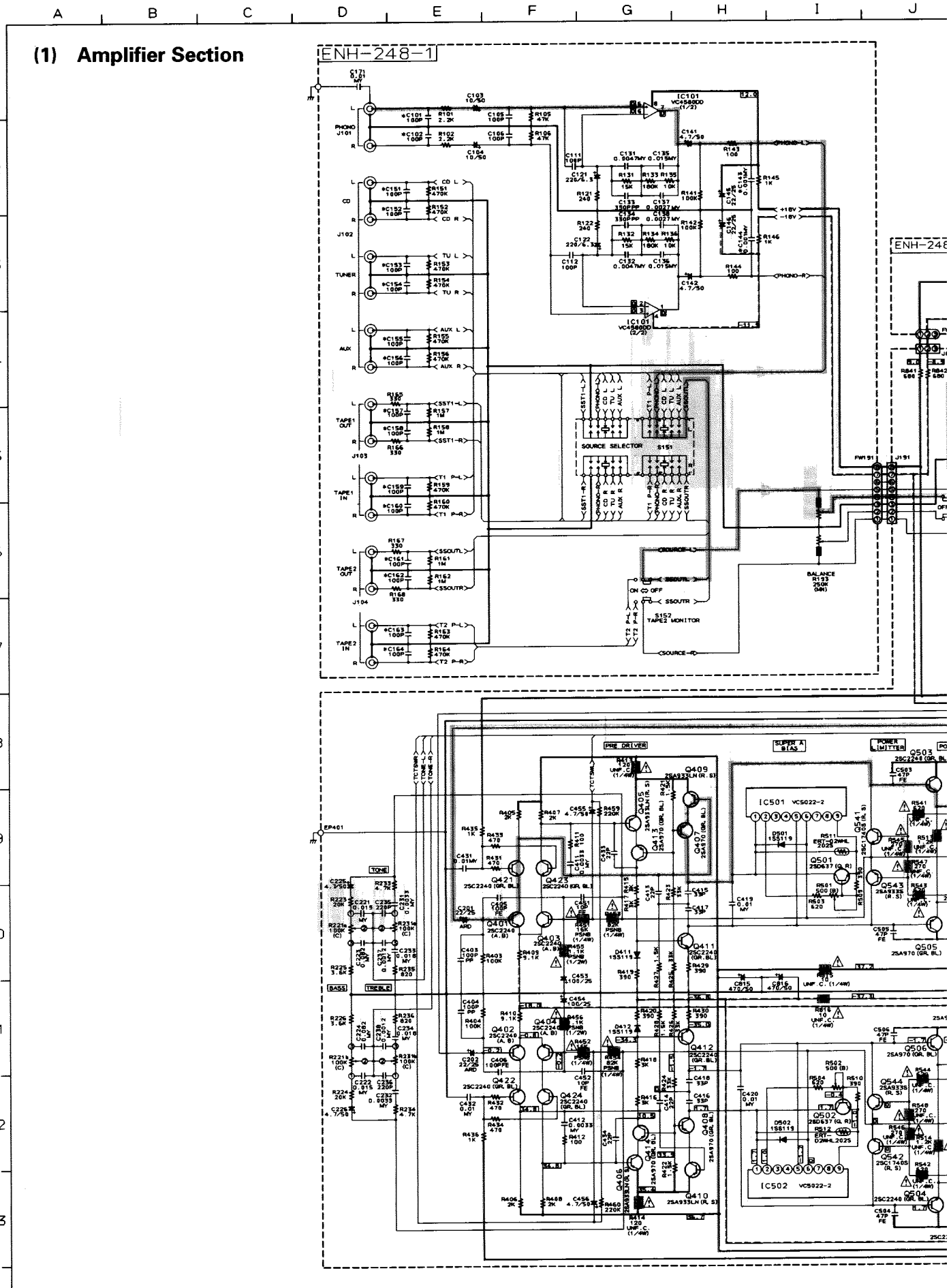


Block Diagrams



Schematic Diagrams

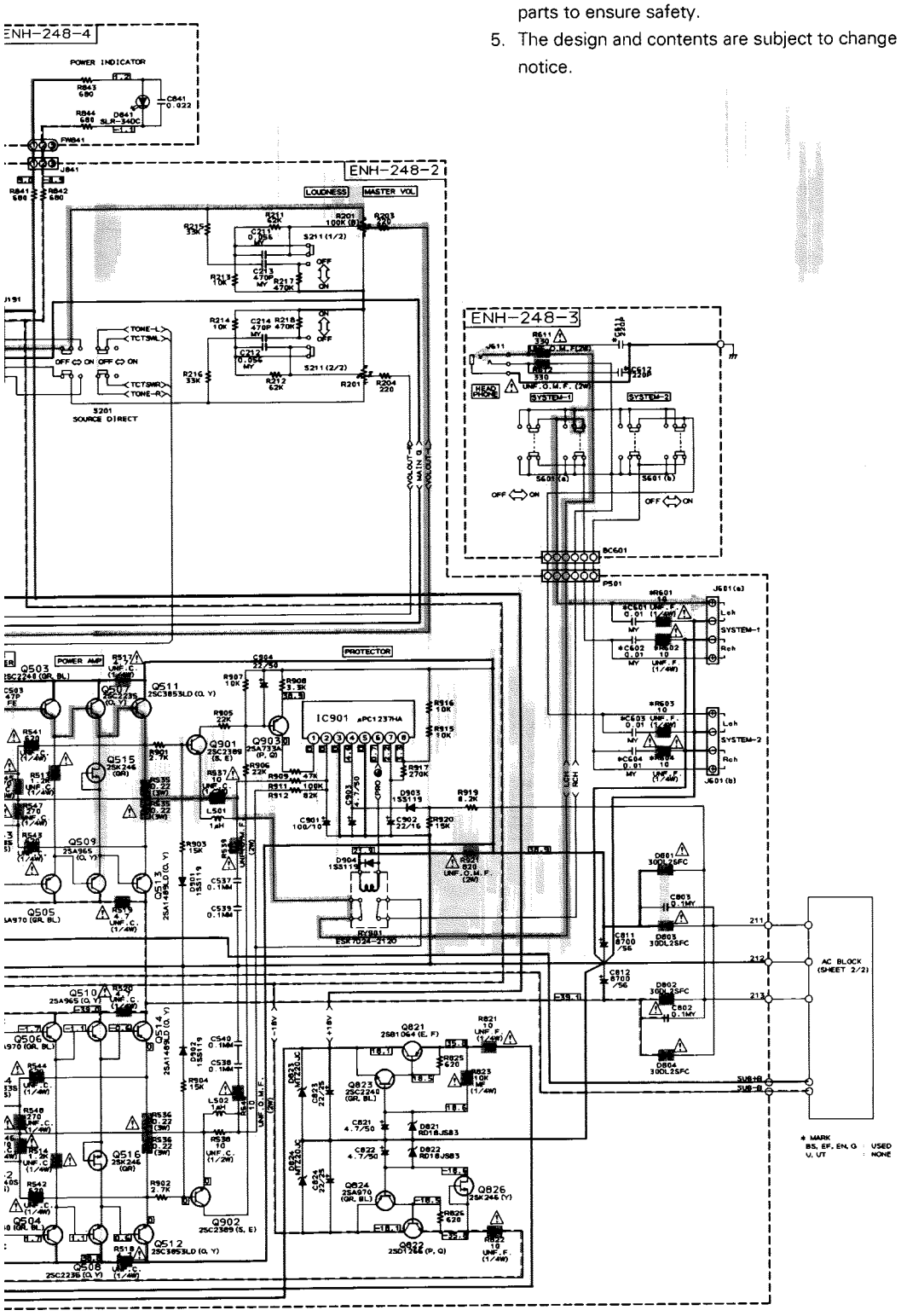
(1) Amplifier Section



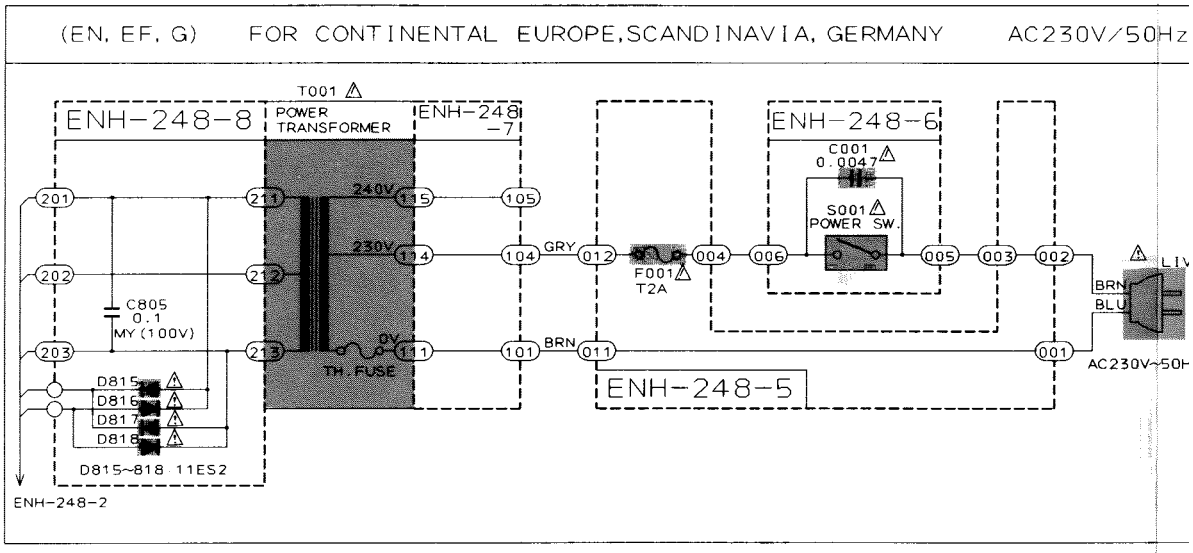
J K L M N O P Q R S

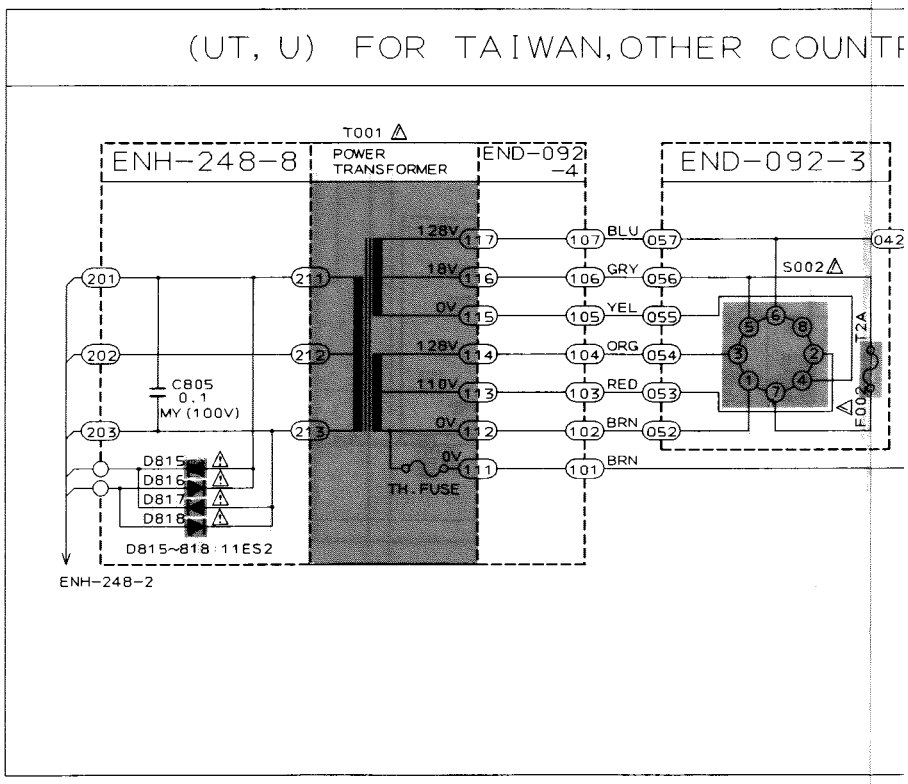
Notes:

1. ——— indicates + B power supply.
2. - - - - - - indicates – B power supply.
3. ▒▒▒ indicates main signal path.
4. When replacing the parts in the shaded are (▒▒▒) and those marked with ⚠ , be sure to use the designated parts to ensure safety.
5. The design and contents are subject to change without notice.

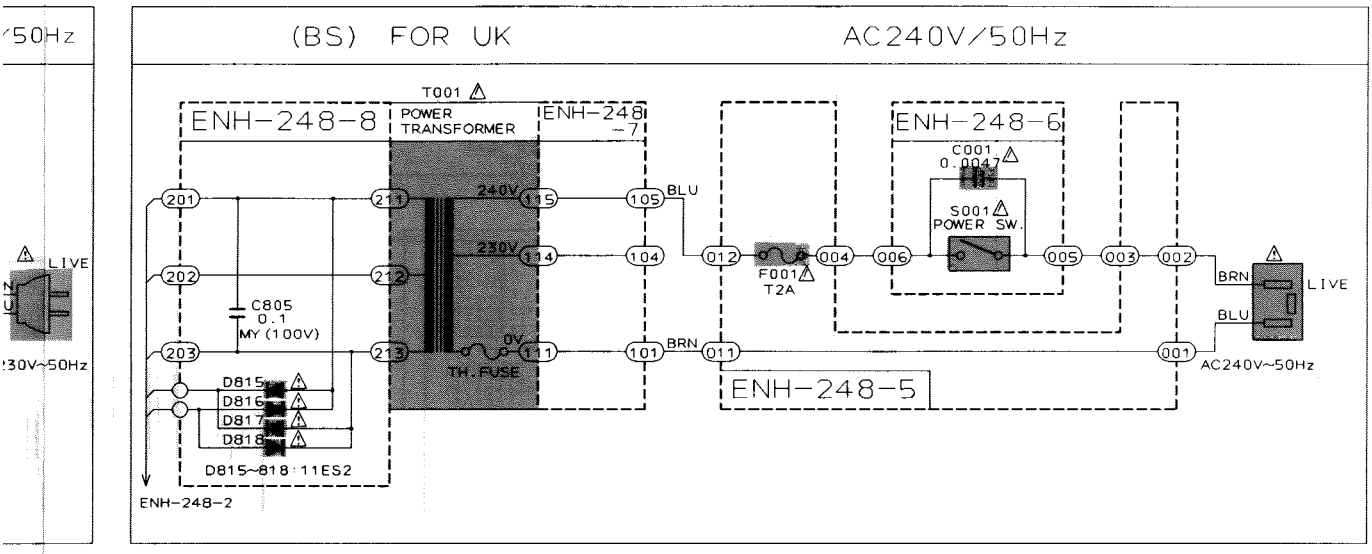


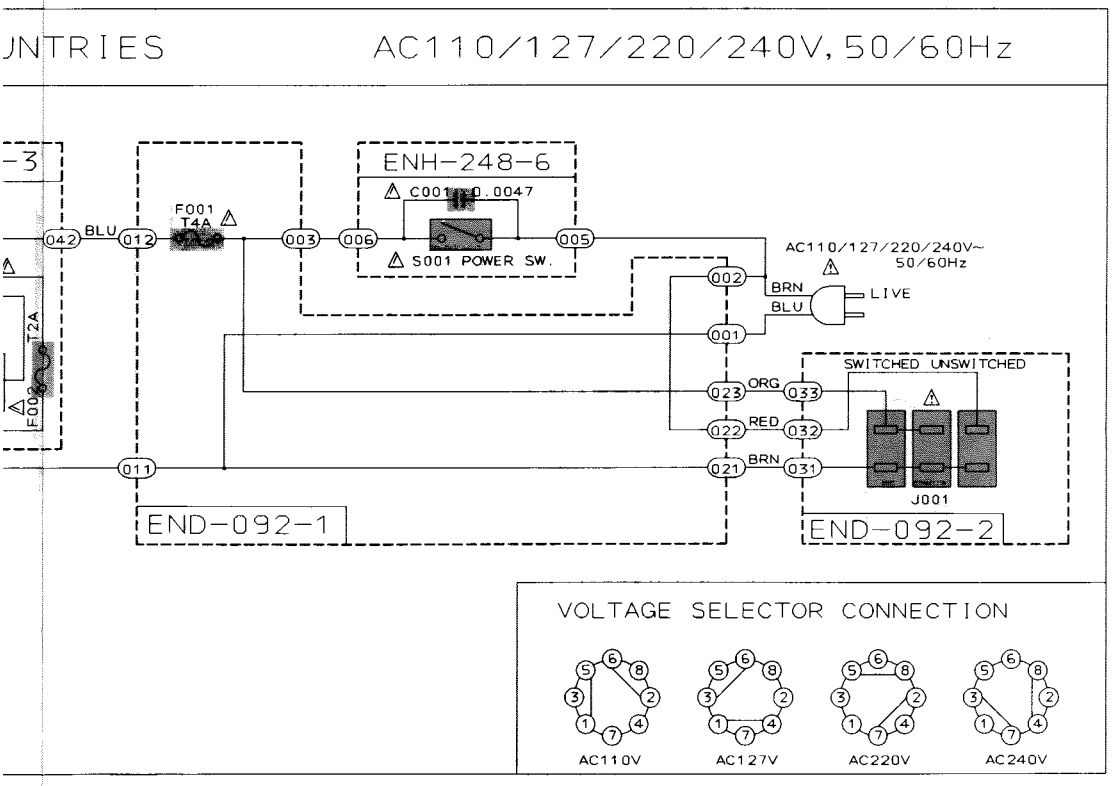
(2) Power Primary Section





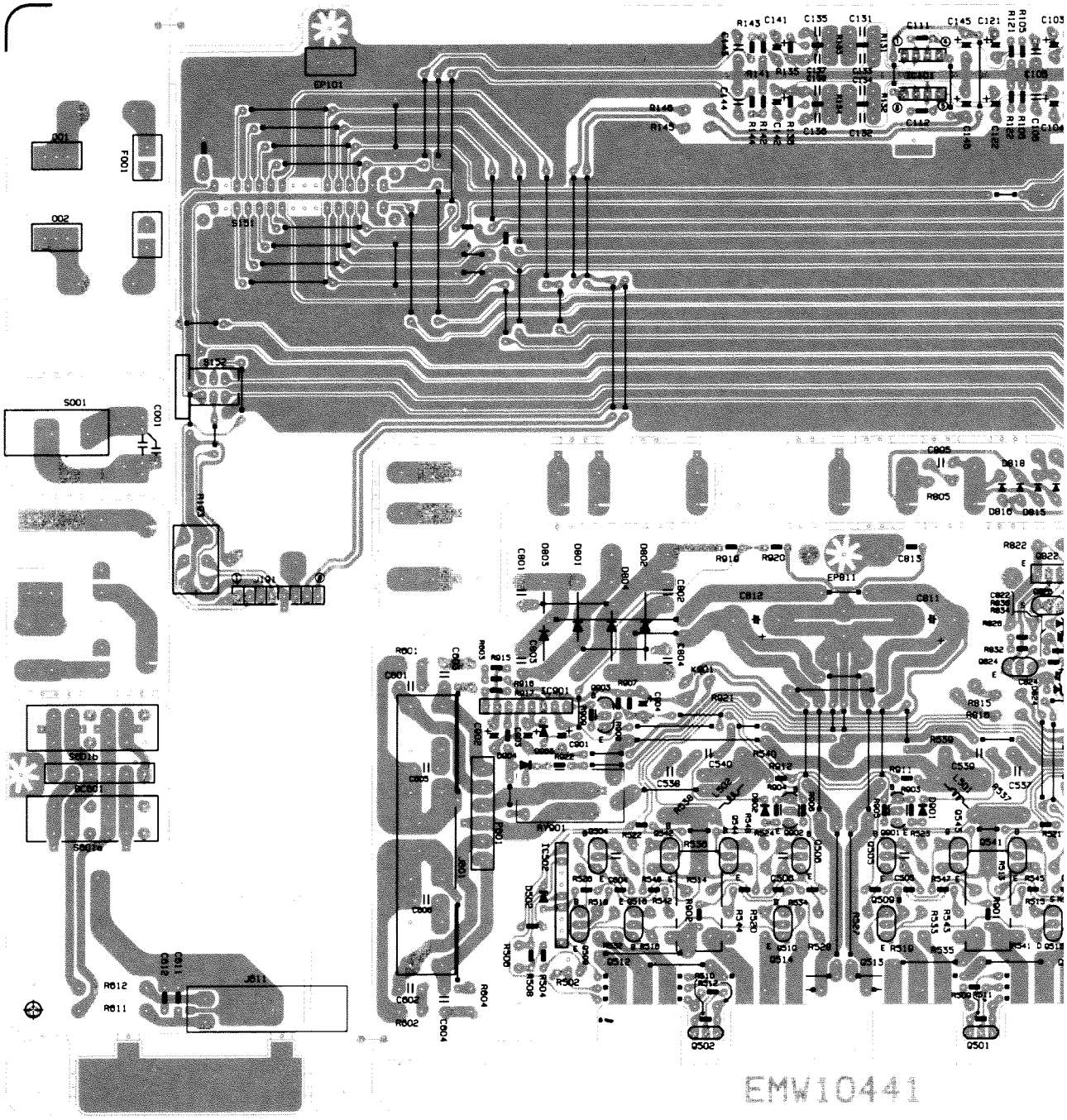
J K L M N O P Q R S


(BS) FOR UK
AC240V/50Hz
T001
ENH-248-8
POWER TRANSFORMER
ENH-248-7
240V
230V
0V
TH.FUSE
C805 0.1 MY (100V)
D815
D816
D817
D818
D815~818 : 11ES2
ENH-248-2
BLU
BRN
F001 T2A
ENH-248-6
C001 0.0047
S001 POWER SW.
LIVE
AC240V~50Hz
ENH-248-5

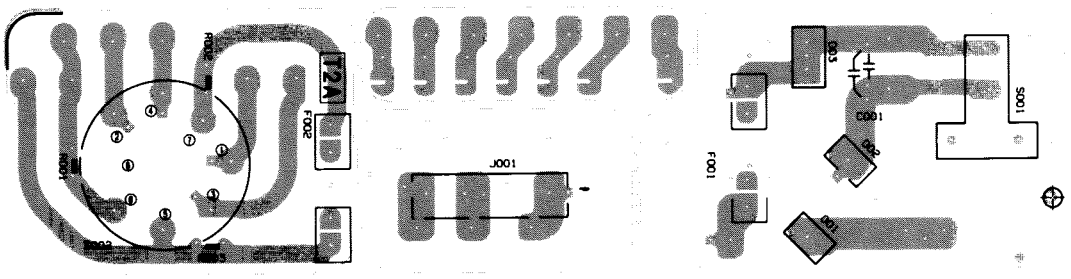

JNTRIES
AC110/127/220/240V, 50/60Hz
ENH-248-6
C001 0.0047
S001 POWER SW.
F001 T4A
BLU
BRN
AC110/127/220/240V~ 50/60Hz
LIVE
SWITCHED UNSWITCHED
ORG
RED
BRN
J001
END-092-1
END-092-2
VOLTAGE SELECTOR CONNECTION
AC110V
AC127V
AC220V
AC240V

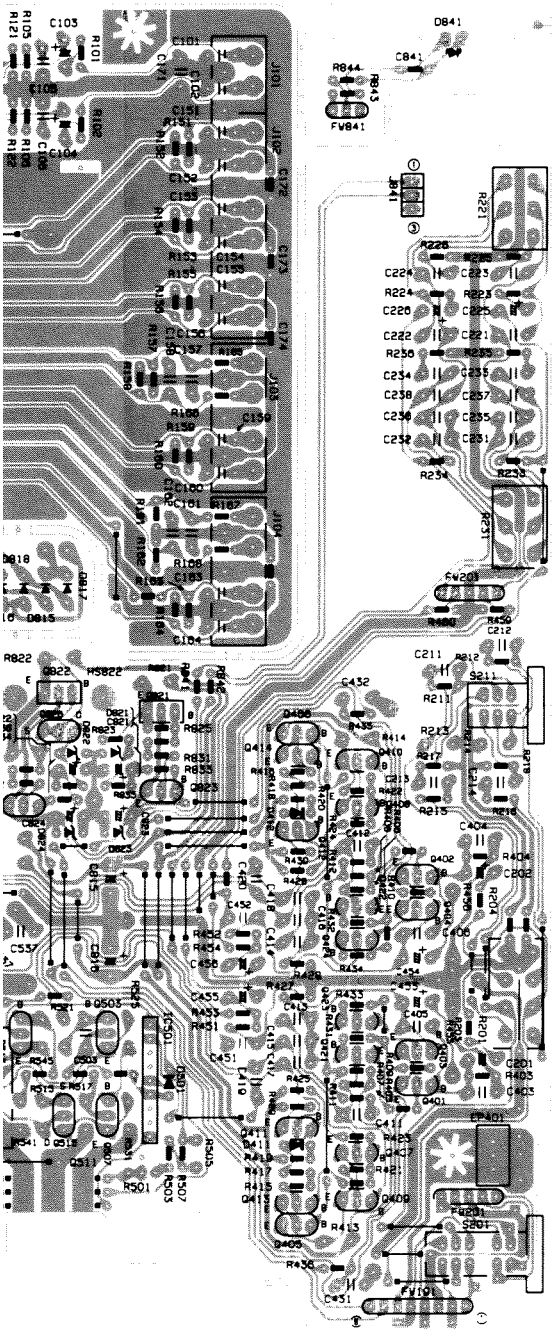
Printed Circuit Boards

■ Amplifier Selector & Power Supply PCB (ENH-248)



■ Power Supply PCB (END-092) (Only for Universal Type, Taiwan)





PARTS LIST

Note : All printed circuit borads and its assemblies are not available as service parts.

Contents

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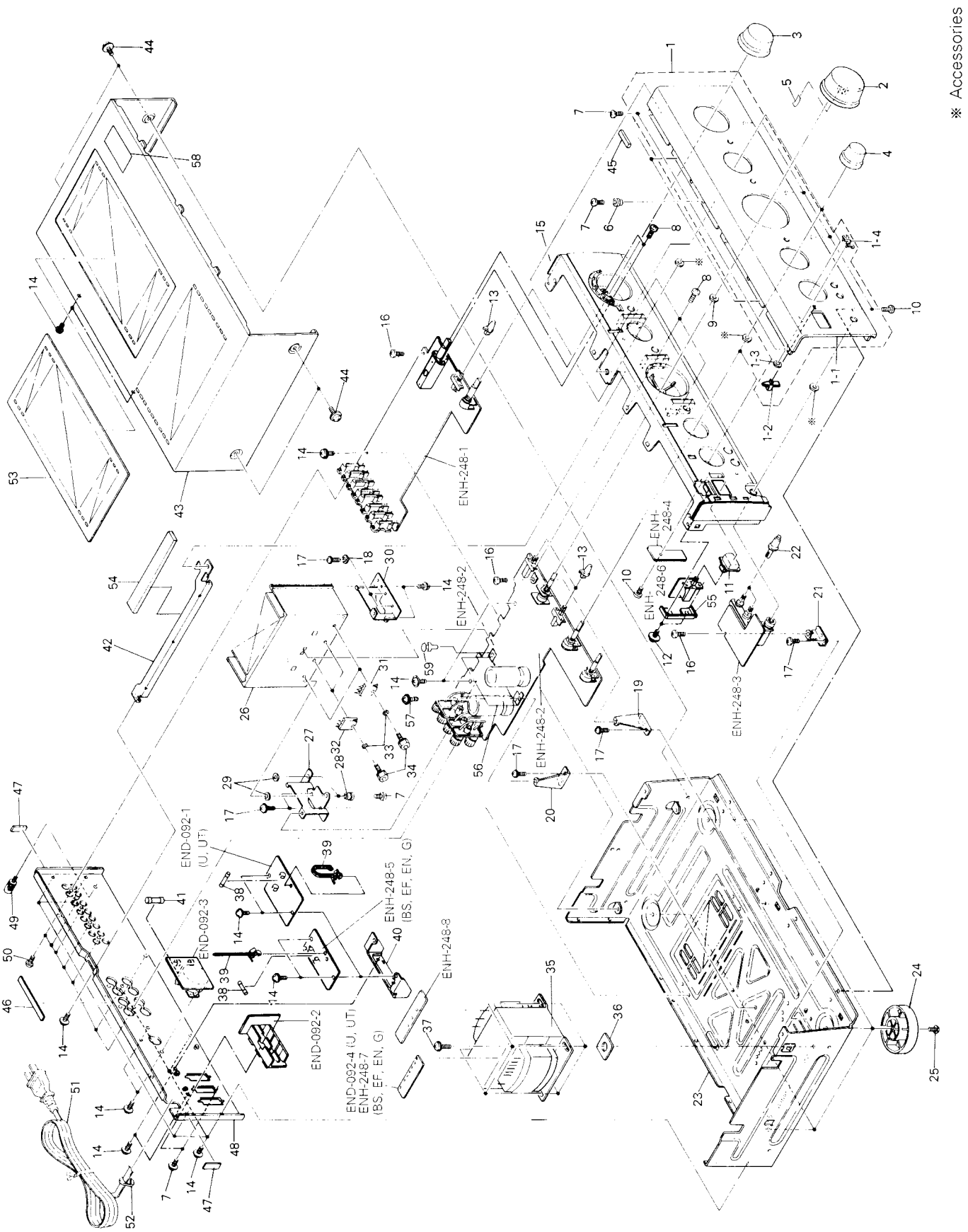
■ ENH-248 [ ] Amplifire, Selector & Power Supply PC Board Ass'y 2-5
■ END-092 [E] Power Supply PC Board Ass'y 2-9
Accessories List 2-10
Packing Materials and Part Numbers 2-11

General Exploded View and Parts List

Symbol No. M 1 M M

※ Accessories



■ Parts List

Symbol No. M 1 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-AXA372BKE(S	FRONT PANEL ASSY	1		
	1-1	E208190-007	FRONT PANEL	1		
	1-2	E408141-001	INDICATOR LENS	1		
	1-3	E60912-003	SPEED NUT	1		
	1-4	E72968-001	JVC MARK	1		
	2	E308989-004	VOLUME KNOB	1		
	3	E308096-005	SELECT KNOB	1		
	4	E308097-005	TONE KNOB	3		
	5	E408294-001	SPACER	1		
	6	BUSH-PUL	BUSHING	1		
	7	SDSG3008CC	TAPPING SCREW	4		
		SDSG3008CC	TAPPING SCREW	2		U
		SDSG3008CC	TAPPING SCREW	2		UT
	8	SBST3008CC	TAPPING SCREW	5		
	9	E71862-001	VOLUME NUT	1		
	10	SDSF3008M	SCREW	5		
	11	E406481-004	PUSH BUTTON	1		
	12	E407098-001	SPECIAL SCREW	2		
	13	E407321-002SM	PUSH BUTTON	3		
	14	GBSG3006CC	SCREW	15		
		GBSG3006CC	SCREW	2		U
		GBSG3006CC	SCREW	2		UT
	15	E102876-003	FRONT BASE	1		
	16	E74266-002	SPECIAL SCREW	3		
	17	GBST3006CC	TAPPING SCREW	7		
	18	WBS3000CC	WASHER	2		
	19	E408149-001	P.W.BOARD BRACKET	1		
	20	E408149-002	P.W.BOARD BRACKET	1		
	21	E408143-002	P.W.BOARD BRACKET	1		
	22	E407110-002	PUSH BUTTON	2		
	23	E102877-003ST	CHASSIS BASE	1		
	24	E307427-008	FOOT ASSY	4		BS
		E307427-008	FOOT ASSY	4		EF
		E307427-008	FOOT ASSY	4		EN
		E307427-008	FOOT ASSY	4		G
		E307427-007	FOOT ASSY	4		U
		E307427-007	FOOT ASSY	4		UT
	25	GBST3008CC	TAPPING SCREW	4		
	26	E308990-001ST	HEAT SINK	1		
	27	E308991-001	HEAT SINK BRACKET	1		
	28	BUSH-PUL	BUSHING	2	REAR	
	29	E73967-001	SPACER	2	REAR	
	30	E308991-002	HEAT SINK BRACKET	1		
	31	2SA1489LD(O,Y)	SI.TRANSISTOR	2	Q513,514	
	32	2SC3853LD(O,Y)	SI.TRANSISTOR	2	Q511,512	
	33	WNS3000CC	WASHER	4		
	34	E73525-003	SCREW	4		
⚠	35	ETP1100-52EABS	POWER TRANSFORMER	1		BS
⚠		ETP1100-52EA	POWER TRANSFORMER	1		EF
⚠		ETP1100-52EA	POWER TRANSFORMER	1		EN
⚠		ETP1100-52EA	POWER TRANSFORMER	1		G
⚠		ETP1100-52FA	POWER TRANSFORMER	1		U
⚠		ETP1100-52FA	POWER TRANSFORMER	1		UT
	36	E407337-001	SPACER	4	Under the Transformer	
	37	E61661-003	SPECIAL SCREW	4		

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
⚠	38	QMF51E2-2R0J1BS	FUSE	1	F001 (T2.0A/250V)	BS
⚠		QMF51E2-2R0	FUSE	1	F001 (T2.0A/250V)	EF
⚠		QMF51E2-2R0	FUSE	1	F001 (T2.0A/250V)	EN
⚠		QMF51E2-2R0	FUSE	1	F001 (T2.0A/250V)	G
⚠		QMF51E2-4R0J1	FUSE	1	F001 (T4.0A/250V)	U
⚠		QMF51E2-4R0J1	FUSE	1	F001 (T4.0A/250V)	UT
	39	E307572-001	FASTENER	1		
	40	E407512-001	BRACKET	1		
⚠	41	QMF51E2-2R0	FUSE	1	F002	U
⚠		QMF51E2-2R0	FUSE	1	F002	UT
	42	E308992-001	STAY BRACKET	1		
	43	E26753-003	METAL COVER	1		
	44	E61660-004	SPECIAL SCREW	4		
	45	E306805-092	SPACER	2		
	46	EXO080005N20S	SPACER	1	UPPER	
	47	EXO020010R10S10	SPACER	2	SIDE	
	48	E208192-002	REAR PANEL	1		BS
		E208192-001	REAR PANEL	1		EF
		E208192-001	REAR PANEL	1		EN
		E208192-001	REAR PANEL	1		G
		E208192-003	REAR PANEL	1		U
		E208192-003	REAR PANEL	1		UT
	-	E308522-043	RATING LABEL	1		UT
	-	E308522-043	RATING LABEL	1		UT
	49	E408091-001	GROUND TERMINAL	1		
	50	E73273-003	SPECIAL SCREW	7		
⚠	51	QMP5530-0085BS	POWER CORD	1		BS
⚠		QMP3900-200	POWER CORD	1		EF
⚠		QMP3900-200	POWER CORD	1		EN
⚠		QMP3900-200	POWER CORD	1		G
⚠		QMP7520-200	POWER CORD	1		U
⚠		QMP7520-200	POWER CORD	1		UT
⚠	52	QHS3771-108BS	P.W.BOARD STOPPER	1		BS
⚠		QHS3771-108	CORD STOPPER	1		EF
⚠		QHS3771-108	CORD STOPPER	1		EN
⚠		QHS3771-108	CORD STOPPER	1		G
⚠		QHS3771-108	CORD STOPPER	1		U
⚠		QHS3771-108	CORD STOPPER	1		UT
	53	E306233-002	PROTECT SHEET	1		BS
		E306233-002	PROTECT SHEET	1		EF
		E306233-002	PROTECT SHEET	1		EN
		E306233-002	PROTECT SHEET	1		U
		E306233-002	PROTECT SHEET	1		UT
	54	E306805-134	SPACER			
	55	E408396-001	SWITCH BRACKET			
	56	E408446-001	SHIELD PLATE			
	57	SBSG3008CC	SCREW			
	58	E67000-005	CAUTION LABEL			
	59	E48729-009	PLASTIC RIVET			
	-	E61029-005	NUMBER LABEL	1		
	-	QZL1007-001	BEAB LABEL	1		BS
	-	QZL1031-101	LABEL	1		EF
	-	E70027-001	LABEL	1		EN
	-	E407619-031	FTZ LABEL	1		G
	-	E408450-094	LABEL	1		Except U,UT

⚠ : Safety Parts

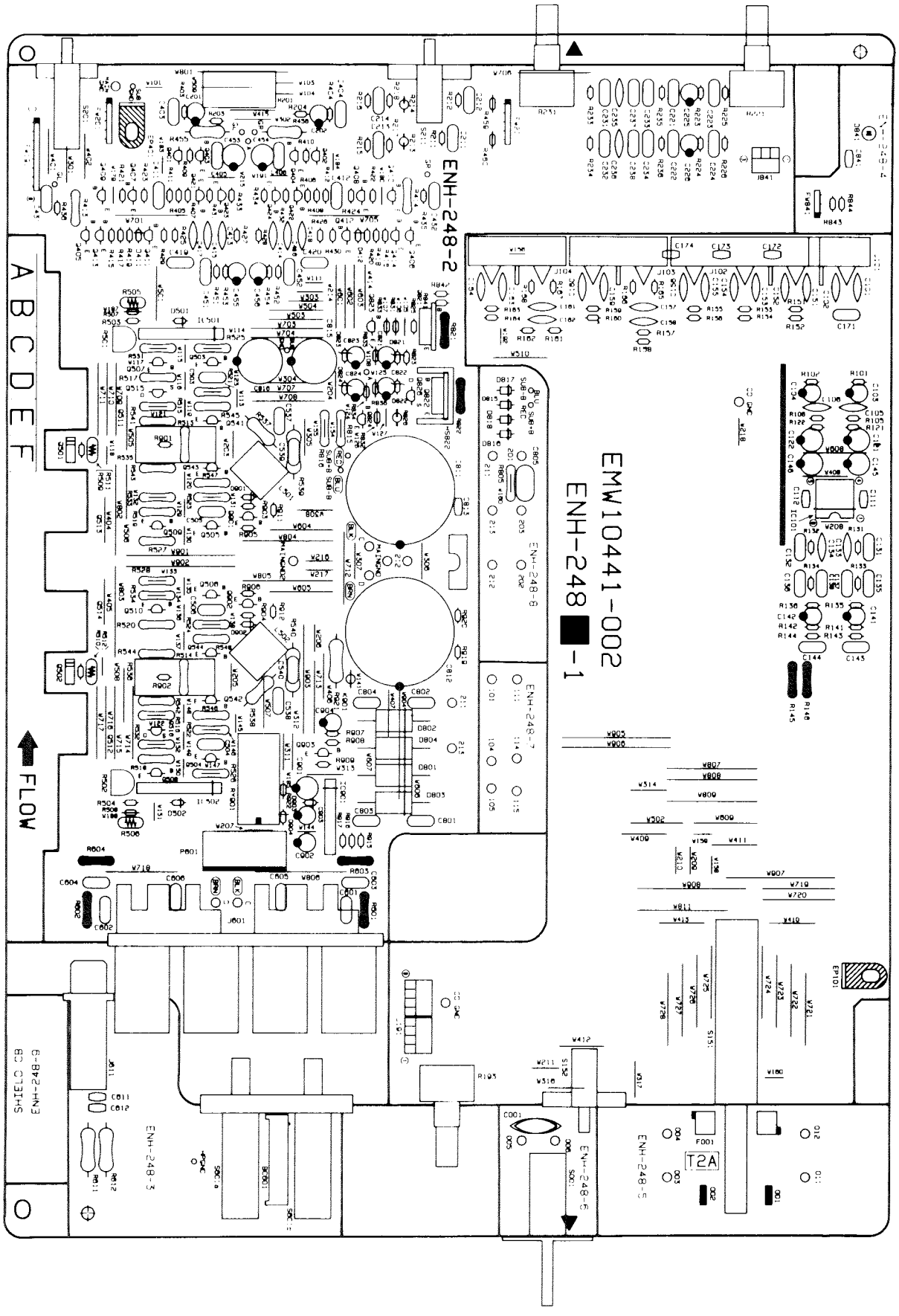
The Marks for Designated Areas

BS .... the U.K. EF ..... Continental Europe EN .... Scandinavia
G ..... Germany U ..... Universal Type UT .... Taiwan
No mark indicates all area.

Printed Circuit Board Ass'y and Parts List

■ENH-248 □ Amplifire, Selector & Power Supply PC Board Ass'y

Note: ENH-248 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
ENH-248 [A]	G	Germany
ENH-248 [B]	EF EN	Continental Europe Scandinavia
ENH-248 [C] BS	BS	the U.K.
ENH-248 [D]	U UT	Universal Type Taiwan

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q401	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q402	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q403	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q404	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q405	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q406	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q407	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q408	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q409	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q410	2SA933LN(R,S)	SI.TRANSIST ROHM	
	Q411	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q412	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q413	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q414	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q421	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q422	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q423	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q424	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q501	2SD637(Q,R)	SI.TRANSIST MATSUSHITA	
	Q502	2SD637(Q,R)	SI.TRANSIST MATSUSHITA	
	Q503	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q504	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q505	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q506	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q507	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q508	2SC2235(O,Y)	SI.TRANSIST TOSHIBA	
	Q509	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q510	2SA965(Y)	SI.TRANSIST TOSHIBA	
	Q515	2SK246(GR)	F.E.T	
	Q516	2SK246(GR)	F.E.T	
	Q541	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q542	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q543	2SA933S(RS)	SI.TRANSIST	
	Q544	2SA933S(RS)	SI.TRANSIST	
	Q821	2SB1064(E,F)	SI.TRANSIST ROHM	
	Q822	2SD1266	SI.TRANSIST MATSUSHITA	
	Q823	2SC2240(GR,BL)	SI.TRANSIST TOSHIBA	
	Q824	2SA970(GR)	SI.TRANSIST TOSHIBA	
	Q826	2SK246(Y)	F.E.T.	
	Q901	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q902	2SC2389(S,E)	SI.TRANSIST ROHM	
	Q903	2SA733A(P,K)	SI.TRANSIST	

⚠ :SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC101	VC4580DD	I.C(MONO-AN	
	IC501	VC5022-2	I.C(MONO-AN SANYO	
	IC502	VC5022-2	I.C(MONO-AN SANYO	
	IC901	UPC1237HA	I.C(MONO-AN NEC	

⚠ :SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D411	1SS119	SI.DIODE	
	D412	1SS119	SI.DIODE	
	D501	1SS119	SI.DIODE	
	D502	1SS119	SI.DIODE	
⚠	D801	30DL2FC	SI.DIODE NIHONINTER	
⚠	D802	30DL2FC	SI.DIODE NIHONINTER	
⚠	D803	30DL2FC	SI.DIODE NIHONINTER	
⚠	D804	30DL2FC	SI.DIODE NIHONINTER	
	D815	11ES2	SI.DIODE NIHONINTER	
	D816	11ES2	SI.DIODE NIHONINTER	
	D817	11ES2	SI.DIODE NIHONINTER	
	D818	11ES2	SI.DIODE NIHONINTER	
	D821	RD18JSB3	ZENER DIODE NEC	
	D822	RD18JSB3	ZENER DIODE NEC	
	D823	MTZ20JC	ZENER DIODE ROHM	
	D824	MTZ20JC	ZENER DIODE ROHM	
	D841	SLR-342DCA47	L.E.D. ROHM	
	D901	1SS119	SI.DIODE	
	D902	1SS119	SI.DIODE	
	D903	1SS119	SI.DIODE	
	D904	1SS119	SI.DIODE	

⚠ :SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	C001	QCZ9050-472ABS	4700PF CER.CAPACI	BS
⚠	C001	QCZ9050-472A	4700PF CER.CAPACI	EF
⚠	C001	QCZ9050-472A	4700PF CER.CAPACI	EN
⚠	C001	QCZ9050-472A	4700PF CER.CAPACI	G
⚠	C001	QCZ9050-472A	4700PF CER.CAPACI	U
⚠	C001	QCZ9050-472A	4700PF CER.CAPACI	UT
	C101	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C101	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C101	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C101	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C102	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C102	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C102	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C102	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C103	EETB1HM-106E	10MF 50V E.CAPACITO	
	C104	EETB1HM-106E	10MF 50V E.CAPACITO	
	C105	QCS31HJ-101Z	100PF 50V CER.CAPACI	
	C106	QCS31HJ-101Z	100PF 50V CER.CAPACI	
	C111	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C112	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C121	EETBOJM-227E	220MF 6.3V E.CAPACITO	
	C122	EETBOJM-227E	220MF 6.3V E.CAPACITO	
	C131	QFN81HJ-472	4700PF 50V MYLAR CAPA	
	C132	QFN81HJ-472	4700PF 50V MYLAR CAPA	
	C133	QCS31HJ-331Z	330PF 50V CER.CAPACI	
	C134	QCS31HJ-331Z	330PF 50V CER.CAPACI	
	C135	QFN81HJ-153	0.015MF 50V MYLAR CAPA	
	C135	QFVC1HJ-153ZN	0.015MF 50V METAL.MYLA	
	C136	QFN81HJ-153	0.015MF 50V MYLAR CAPA	
	C136	QFVC1HJ-153ZN	0.015MF 50V METAL.MYLA	
	C137	QFN81HJ-272	2700PF 50V METAL.MYLA	
	C138	QFN81HJ-272	2700PF 50V METAL.MYLA	
	C141	EETB1HM-475E	4.7MF 50V E.CAPACITO	
	C142	EETB1HM-475E	4.7MF 50V E.CAPACITO	
	C143	QFN81HJ-102	1000PF 50V METAL.MYLA	BS
	C143	QFN81HJ-102	1000PF 50V METAL.MYLA	EF
	C143	QFN81HJ-102	1000PF 50V METAL.MYLA	EN
	C143	QFN81HJ-102	1000PF 50V METAL.MYLA	G
	C144	QFN81HJ-102	1000PF 50V METAL.MYLA	BS
	C144	QFN81HJ-102	1000PF 50V METAL.MYLA	EF
	C144	QFN81HJ-102	1000PF 50V METAL.MYLA	EN
	C144	QFN81HJ-102	1000PF 50V METAL.MYLA	G
	C145	EETB1EM-226E	22MF 25V E.CAPACITO	
	C146	EETB1EM-226E	22MF 25V E.CAPACITO	
	C151	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C151	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C151	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C151	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C152	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C152	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C152	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C152	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C153	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C153	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C153	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C153	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C154	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C154	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C154	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C154	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C155	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C155	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C155	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C155	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C156	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C156	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C156	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C156	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C157	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C157	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C157	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C157	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C158	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C158	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C158	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C158	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C159	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C159	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C159	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C159	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C160	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C160	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C160	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C160	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C161	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C161	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C161	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C161	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C162	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C162	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C162	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN
	C162	QCS31HJ-101Z	100PF 50V CER.CAPACI	G
	C163	QCS31HJ-101Z	100PF 50V CER.CAPACI	BS
	C163	QCS31HJ-101Z	100PF 50V CER.CAPACI	EF
	C163	QCS31HJ-101Z	100PF 50V CER.CAPACI	EN

⚠ :SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C163	QCS31HJ-101Z	100PF	50V	CER.CAPACI	G
	C164	QCS31HJ-101Z	100PF	50V	CER.CAPACI	BS
	C164	QCS31HJ-101Z	100PF	50V	CER.CAPACI	EF
	C164	QCS31HJ-101Z	100PF	50V	CER.CAPACI	EN
	C164	QCS31HJ-101Z	100PF	50V	CER.CAPACI	G
	C171	QFN81HJ-103	0.01MF	50V	METAL.MYLA	
	C201	EET2508-226ZE	22MF		E.CAPACITO	
	C202	EET2508-226ZE	22MF		E.CAPACITO	
	C211	QFLC1HJ-563ZM	0.056MF	50V	MYLAR	
	C212	QFLC1HJ-563ZM	0.056MF	50V	MYLAR	
	C213	QFN31HJ-471Z	470PF	50V	MYLAR CAPA	
	C214	QFN31HJ-471Z	470PF	50V	MYLAR CAPA	
	C221	QFLC1HJ-153ZM	0.015MF	50V	METAL.MYLA	
	C222	QFLC1HJ-153ZM	0.015MF	50V	METAL.MYLA	
	C223	QFLC1HJ-823ZM	0.082MF	50V	AL E.CAPAC	
	C224	QFLC1HJ-823ZM	0.082MF	50V	AL E.CAPAC	
	C225	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C226	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C231	QFN81HJ-332	3300PF	50V	METAL.MYLA	
	C232	QFN81HJ-332	3300PF	50V	METAL.MYLA	
	C233	QFLC1HJ-183ZM	0.018MF	50V	METAL.MYLA	
	C234	QFLC1HJ-183ZM	0.018MF	50V	METAL.MYLA	
	C235	QCS31HJ-221Z	220PF	50V	CER.CAPACI	
	C236	QCS31HJ-221Z	220PF	50V	CER.CAPACI	
	C237	QFN31HJ-122Z	1200PF	50V	MYLAR CAPA	
	C238	QFN31HJ-122Z	1200PF	50V	MYLAR CAPA	
	C403	QFP81HJ-101	100PF	50V	POLYPROPY.	
	C404	QFP81HJ-101	100PF	50V	POLYPROPY.	
	C405	EFF001J-101			FILM MICA	
	C406	EFF001J-101			FILM MICA	
	C411	QFLC1HJ-332ZM	3300PF	50V	METAL.MYLA	
	C412	QFLC1HJ-332ZM	3300PF	50V	METAL.MYLA	
	C413	QCS11HJ-220	22PF	50V	CER.CAPACI	
	C414	QCS11HJ-220	22PF	50V	CER.CAPACI	
	C415	QCS31HJ-330Z	33PF	50V	CER.CAPACI	
	C416	QCS31HJ-330Z	33PF	50V	CER.CAPACI	
	C417	QCS31HJ-330Z	33PF	50V	CER.CAPACI	
	C418	QCS31HJ-330Z	33PF	50V	CER.CAPACI	
	C419	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	
	C420	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	
	C431	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	
	C432	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	
	C433	QCS11HJ-220	22PF	50V	CER.CAPACI	
	C434	QCS11HJ-220	22PF	50V	CER.CAPACI	
	C451	EFF001J-100			FILM MICA	
	C452	EFF001J-100			FILM MICA	
	C453	EETB1EM-107E	100MF	25V	E.CAPACITO	
	C454	EETB1EM-107E	100MF	25V	E.CAPACITO	
	C455	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C456	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C503	EFF001J-470			FILM MICA	
	C504	EFF001J-470			FILM MICA	
	C505	EFF001J-470			FILM MICA	
	C506	EFF001J-470			FILM MICA	
	C537	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C538	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C539	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C540	QFVC1HJ-104ZN	0.1MF	50V	METAL.MYLA	
	C601	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	BS
	C601	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EF
	C601	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EN
	C601	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	G
	C602	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	BS
	C602	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EF
	C602	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EN
	C602	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	G
	C603	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	BS
	C603	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EF
	C603	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EN
	C603	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	G
	C604	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	BS
	C604	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EF
	C604	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	EN
	C604	QFLC1HJ-103ZM	0.01MF	50V	METAL.MYLA	G
	C611	QCBB1HK-221Y	220PF	50V	CER.CAPACI	BS
	C611	QCBB1HK-221Y	220PF	50V	CER.CAPACI	EF
	C611	QCBB1HK-221Y	220PF	50V	CER.CAPACI	EN
	C611	QCBB1HK-221Y	220PF	50V	CER.CAPACI	G
	C612	QCBB1HK-221Y	220PF	50V	CER.CAPACI	BS
	C612	QCBB1HK-221Y	220PF	50V	CER.CAPACI	EF
	C612	QCBB1HK-221Y	220PF	50V	CER.CAPACI	EN
	C612	QCBB1HK-221Y	220PF	50V	CER.CAPACI	G
	C802	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C803	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C805	QFN82AJ-104	0.1MF	100V	MYLAR CAPA	
	C811	EEW5614-878E	8700MF		E.CAPACITO	
	C812	EEW5614-878E	8700MF		E.CAPACITO	
	C815	QETB1HM-477	470MF	50V	AL E.CAPAC	
	C816	QETB1HM-477	470MF	50V	AL E.CAPAC	
	C821	EETB1HM-475E	4.7MF	50V	E.CAPACITO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C822	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C823	EETB1EM-226E	22MF	25V	E.CAPACITO	
	C824	EETB1EM-226E	22MF	25V	E.CAPACITO	
	C841	QCHB1EZ-223	0.022MF	25V	CER.CAPACI	
	C901	EETB1AM-107E	100MF	10V	E.CAPACITO	
	C902	EETB1CM-226E	22MF	16V	E.CAPACITO	
	C903	EETB1HM-475E	4.7MF	50V	E.CAPACITO	
	C904	EETB1CM-226E	22MF	16V	E.CAPACITO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD161J-222	2.2K	1/6W	CARBON RES	
	R102	QRD161J-222	2.2K	1/6W	CARBON RES	
	R105	QRD161J-473	47K	1/6W	CARBON RES	
	R106	QRD161J-473	47K	1/6W	CARBON RES	
	R121	QRD161J-241	240	1/6W	CARBON RES	
	R122	QRD161J-241	240	1/6W	CARBON RES	
	R131	QRD161J-153	15K	1/6W	CARBON RES	
	R132	QRD161J-153	15K	1/6W	CARBON RES	
	R133	QRD161J-184	180K	1/6W	CARBON RES	
	R134	QRD161J-184	180K	1/6W	CARBON RES	
	R135	QRD161J-103	10K	1/6W	CARBON RES	
	R136	QRD161J-103	10K	1/6W	CARBON RES	
	R141	QRD161J-104	100K	1/6W	CARBON RES	
	R142	QRD161J-104	100K	1/6W	CARBON RES	
	R143	QRD161J-101	100	1/6W	CARBON RES	
	R144	QRD161J-101	100	1/6W	CARBON RES	
	R145	QRD161J-102	1K	1/6W	CARBON RES	
	R146	QRD161J-102	1K	1/6W	CARBON RES	
	R151	QRD161J-474	470K	1/6W	CARBON RES	
	R152	QRD161J-474	470K	1/6W	CARBON RES	
	R153	QRD161J-474	470K	1/6W	CARBON RES	
	R154	QRD161J-474	470K	1/6W	CARBON RES	
	R155	QRD161J-474	470K	1/6W	CARBON RES	
	R156	QRD161J-474	470K	1/6W	CARBON RES	
	R157	QRD161J-105	1M	1/6W	CARBON RES	
	R158	QRD161J-105	1M	1/6W	CARBON RES	
	R159	QRD161J-474	470K	1/6W	CARBON RES	
	R160	QRD161J-474	470K	1/6W	CARBON RES	
	R161	QRD161J-105	1M	1/6W	CARBON RES	
	R162	QRD161J-105	1M	1/6W	CARBON RES	
	R163	QRD161J-474	470K	1/6W	CARBON RES	
	R164	QRD161J-474	470K	1/6W	CARBON RES	
	R165	QRD161J-331	330	1/6W	CARBON RES	
	R166	QRD161J-331	330	1/6W	CARBON RES	
	R167	QRD161J-331	330	1/6W	CARBON RES	
	R168	QRD161J-331	330	1/6W	CARBON RES	
	R193	QVDB98M-EF5C	250K		VARIABLE R	
	R201	QVDB98B-E15C	100K		VARIABLE R	
	R203	QRD161J-221	220	1/6W	CARBON RES	
	R204	QRD161J-221	220	1/6W	CARBON RES	
	R211	QRD161J-623	62K	1/6W	CARBON RES	
	R212	QRD161J-623	62K	1/6W	CARBON RES	
	R213	QRD161J-103	10K	1/6W	CARBON RES	
	R214	QRD161J-103	10K	1/6W	CARBON RES	
	R215	QRD161J-333	33K	1/6W	CARBON RES	
	R216	QRD161J-333	33K	1/6W	CARBON RES	
	R217	QRD161J-474	470K	1/6W	CARBON RES	
	R218	QRD161J-474	470K	1/6W	CARBON RES	
	R221	QVDB98C-E15E	100K		VARIABLE	
	R223	QRD161J-203	20K	1/6W	CARBON RES	
	R224	QRD161J-203	20K	1/6W	CARBON RES	
	R225	QRD161J-362	3.6K	1/6W	CARBON RES	
	R226	QRD161J-362	3.6K	1/6W	CARBON RES	
	R231	QVDB98C-E15E	100K		VARIABLE	
	R233	QRD161J-472	4.7K	1/6W	CARBON RES	
	R234	QRD161J-472	4.7K	1/6W	CARBON RES	
	R235	QRD161J-821	820	1/6W	CARBON RES	
	R236	QRD161J-821	820	1/6W	CARBON RES	
	R403	QRD161J-104	100K	1/6W	CARBON RES	
	R404	QRD161J-104	100K	1/6W	CARBON RES	
	R405	QRD161J-202	2K	1/6W	CARBON RES	
	R406	QRD161J-202	2K	1/6W	CARBON RES	
	R407	QRD161J-202	2K	1/6W	CARBON RES	
	R408	QRD161J-202	2K	1/6W	CARBON RES	
	R409	QRD161J-912	9.1K	1/6W	CARBON RES	
	R410	QRD161J-912	9.1K	1/6W	CARBON RES	
	R411	QRD161J-101	100	1/6W	CARBON RES	
	R412	QRD161J-101	100	1/6W	CARBON RES	
	R413	QRD14CJ-121SX	120	1/4W	UNF.CARBON	
	R414	QRD14CJ-121SX	120	1/4W	UNF.CARBON	
	R415	QRD161J-302	3K	1/6W	CARBON RES	
	R416	QRD161J-302	3K	1/6W	CARBON RES	
	R417	QRD161J-302	3K	1/6W	CARBON RES	
	R418	QRD161J-302	3K	1/6W	CARBON RES	
	R419	QRD161J-391	390	1/6W	CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R420	QRD161J-391	390	1/6W	CARBON RES	
	R421	QRD161J-152	1.5K	1/6W	CARBON RES	
	R422	QRD161J-152	1.5K	1/6W	CARBON RES	
	R423	QRD161J-333	33K	1/6W	CARBON RES	
	R424	QRD161J-333	33K	1/6W	CARBON RES	
	R425	QRD161J-333	33K	1/6W	CARBON RES	
	R426	QRD161J-333	33K	1/6W	CARBON RES	
	R427	QRD161J-152	1.5K	1/6W	CARBON RES	
	R428	QRD161J-152	1.5K	1/6W	CARBON RES	
	R429	QRD161J-391	390	1/6W	CARBON RES	
	R430	QRD161J-391	390	1/6W	CARBON RES	
	R431	QRD161J-471	470	1/6W	CARBON RES	
	R432	QRD161J-471	470	1/6W	CARBON RES	
	R433	QRD161J-471	470	1/6W	CARBON RES	
	R434	QRD161J-471	470	1/6W	CARBON RES	
	R435	QRD161J-102	1K	1/6W	CARBON RES	
	R436	QRD161J-102	1K	1/6W	CARBON RES	
	R451	ERD004J-163Z	16K		CARBON RES	
	R452	ERD004J-163Z	16K		CARBON RES	
	R453	ERD004J-823Z	82K		CARBON RES	
	R454	ERD004J-823Z	82K		CARBON RES	
	R455	ERD002J-112	1.1K		CARBON RES	
	R456	ERD002J-112	1.1K		CARBON RES	
	R459	QRD161J-224	220K	1/6W	CARBON RES	
	R460	QRD161J-224	220K	1/6W	CARBON RES	
	R501	QVPE601-501	500	0.15W	TRIMMER RE	
	R502	QVPE601-501	500	0.15W	TRIMMER RE	
	R503	QRD161J-621	620	1/6W	CARBON RES	
	R504	QRD161J-621	620	1/6W	CARBON RES	
	R507	QRD161J-101	100	1/6W	CARBON RES	
	R508	QRD161J-101	100	1/6W	CARBON RES	
	R509	QRD161J-391	390	1/6W	CARBON RES	
	R510	QRD161J-391	390	1/6W	CARBON RES	
	R511	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
	R512	ERT-D2WHL202S	2K	1/4W	NEGATIVE T	
⚠	R513	QRD14CJ-122SX	1.2K	1/4W	UNF.CARBON	
⚠	R514	QRD14CJ-122SX	1.2K	1/4W	UNF.CARBON	
⚠	R517	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R518	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R519	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R520	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R535	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R536	ERF032K-R22	0.22	3W	CEM.RESIST	
⚠	R537	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R538	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R539	QRG022J-100AM	10	2W	OXIDE META	
⚠	R540	QRG022J-100AM	10	2W	OXIDE META	
⚠	R541	QRD14CJ-621SX	620	1/4W	UNF.CARBON	
⚠	R542	QRD14CJ-621SX	620	1/4W	UNF.CARBON	
⚠	R543	QRD14CJ-621SX	620	1/4W	UNF.CARBON	
⚠	R544	QRD14CJ-621SX	620	1/4W	UNF.CARBON	
⚠	R545	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R546	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R547	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R548	QRD14CJ-271S	270	1/4W	UNF.CARBON	
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R602	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R602	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R602	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R602	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R603	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R603	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R603	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R603	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R604	QRZ0077-100	10	1/4W	FUSIBLE RE	BS
⚠	R604	QRZ0077-100	10	1/4W	FUSIBLE RE	EF
⚠	R604	QRZ0077-100	10	1/4W	FUSIBLE RE	EN
⚠	R604	QRZ0077-100	10	1/4W	FUSIBLE RE	G
⚠	R611	QRG022J-331AM	330	2W	OXIDE META	
⚠	R612	QRG022J-331AM	330	2W	OXIDE META	
⚠	R815	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R816	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R821	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R822	QRZ0077-100	10	1/4W	FUSIBLE RE	
⚠	R823	QRV144F-1002	10K	1/4W	CONST.META	
⚠	R824	QRV144F-1002	10K	1/4W	CONST.META	
	R825	QRD161J-621	620	1/6W	CARBON RES	
	R826	QRD161J-621	620	1/6W	CARBON RES	
	R841	QRD161J-681	680	1/6W	CARBON RES	
	R842	QRD161J-681	680	1/6W	CARBON RES	
	R843	QRD161J-681	680	1/6W	CARBON RES	
	R844	QRD161J-681	680	1/6W	CARBON RES	
	R901	QRD161J-272	2.7K	1/6W	CARBON RES	
	R902	QRD161J-272	2.7K	1/6W	CARBON RES	
	R903	QRD161J-153	15K	1/6W	CARBON RES	
	R904	QRD161J-153	15K	1/6W	CARBON RES	
	R905	QRD161J-223	22K	1/6W	CARBON RES	
	R906	QRD161J-223	22K	1/6W	CARBON RES	
	R907	QRD161J-103	10K	1/6W	CARBON RES	
	R908	QRD161J-332YTT	3.3K	1/6W	CARBON RES	
	R909	QRD161J-473	47K	1/6W	CARBON RES	
	R911	QRD161J-104	100K	1/6W	CARBON RES	

⚠ :SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R912	QRD161J-823	82K	1/6W	CARBON RES	
	R915	QRD161J-103	10K	1/6W	CARBON RES	
	R916	QRD161J-103	10K	1/6W	CARBON RES	
	R917	QRD161J-274	270K	1/6W	CARBON RES	
	R919	QRD161J-822	8.2K	1/6W	CARBON RES	
	R920	QRD161J-153	15K	1/6W	CARBON RES	
⚠	R921	QRG022J-821AM	820	2W	OXIDE META	
	R922	QRD161J-680	68	1/6W	CARBON RES	

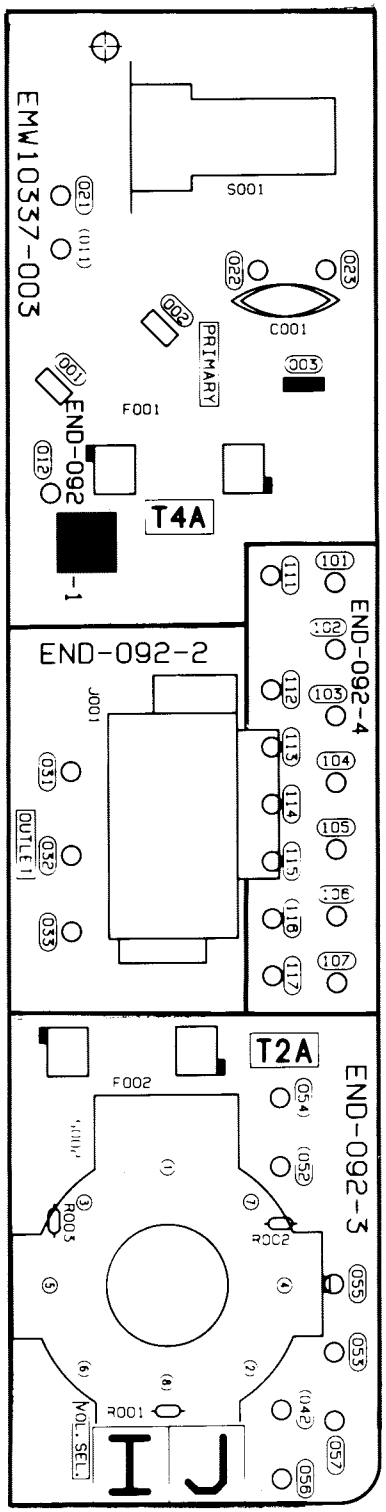
⚠ :SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E3400-431	FELT SPACER	
		QXTF500-015	SHRINK TUBE	
		QWE690-12RR	VINYL WIRE	
		QWE692-12RR	VINYL WIRE	
		QWE694-12RR	VINYL WIRE	
		QWE350-12RR	VINYL WIRE	
		QWE690-18RR	VINYL WIRE	
		QWE690-16RR	VINYL WIRE	
		QWE691-16RR	VINYL WIRE	
		QWE352-16RR	VINYL WIRE	
		QWE356-16RR	VINYL WIRE	
		EWT011-157	TERMINAL WI	
		QWE350-09RR	VINYL WIRE	
		QWE350-04CC	VINYL WIRE	
		E33754-001	CORD CLAMP	
		EMG7331-002	FEEDER CLAM	BS
		EMG7331-002U	CONTACT CLI	BS
		EMZ4001-001	TAB	BS
		QWE881-20RRBS	PIN WIRE	BS
		QWE886-20RRBS	WIRE	BS
		QWE883-26RRBS	WIRE	BS
		QWE884-26RRBS	WIRE	BS
		EMG7331-002	FEEDER CLAM	EF
		EMG7331-002U	CONTACT CLI	EF
		EMZ4001-001	TAB	EF
		QWE881-20RR	VINYL WIRE	EF
		QWE888-20RR	VINYL WIRE	EF
		QWE883-26RR	VINYL WIRE	EF
		QWE884-26RR	VINYL WIRE	EF
		EMG7331-002	FEEDER CLAM	EN
		EMG7331-002U	CONTACT CLI	EN
		EMZ4001-001	TAB	EN
		QWE881-20RR	VINYL WIRE	EN
		QWE888-20RR	VINYL WIRE	EN
		QWE883-26RR	VINYL WIRE	EN
		QWE884-26RR	VINYL WIRE	EN
		EMG7331-002	FEEDER CLAM	G
		EMG7331-002U	CONTACT CLI	G
		EMZ4001-001	TAB	G
		QWE881-20RR	VINYL WIRE	G
		QWE888-20RR	VINYL WIRE	G
		QWE883-26RR	VINYL WIRE	G
		QWE884-26RR	VINYL WIRE	G
		QWE883-28RG	VINYL WIRE	U
		QWE884-28RG	VINYL WIRE	U
		QWE883-28RG	VINYL WIRE	UT
		QWE884-28RG	VINYL WIRE	UT
	J101	EMN00TV-208A	PIN JACK	
	J102	EMN00TV-603A	JACK BOARD	
	J103	EMN00TV-404A	JACK BOARD	
	J104	EMN00TV-404A	JACK BOARD	
	J601	EMB00TV-801A	TERMINAL	BS
	J601	EMB00TV-801B	TERMINAL	EF
	J601	EMB00TV-801B	TERMINAL	EN
	J601	EMB00TV-801A	TERMINAL	G
	J601	EMB00TV-801B	TERMINAL	U
	J601	EMB00TV-801B	TERMINAL	UT
	J611	QMS6302-131	HEADPHONE J	
	J841	EMV7122-103	CONNECT TER	
	L501	EQL0001-1R0	INDUCTOR	
	L502	EQL0001-1R0	INDUCTOR	
	P601	EMV5138-006	CONNECT TER	
⚠	S001	QSP1106-004BS	PUSH SWITCH	BS
⚠	S001	QSP1106-004	PUSH SWITCH	EF
⚠	S001	QSP1106-004	PUSH SWITCH	EN
⚠	S001	QSP1106-004	PUSH SWITCH	G
⚠	S001	QSP1106-004	PUSH SWITCH	U
⚠	S001	QSP1106-004	PUSH SWITCH	UT
	S151	QSR2001-E09A	ROTARY SWIT	
	S152	QSP2001-E03A	PUSH SWITCH	
	S201	QSP2001-E02A	PUSH SWITCH	
	S211	QSP2001-E03A	PUSH SWITCH	
	S601	QST4261-E06	PUSH SWITCH	
	BC601	EWS286-004	SOCKET WIRE	
	EP101	EMZ4002-001Z	EARTH PLATE	
	EP401	EMZ4002-001Z	EARTH PLATE	
	EP801	E70859-001	EARTH PLATE	
	FW191	EWR38B-08LST	FLAT WIRE A	
	FW201	EWR35B-16SST	FLAT WIRE A	
	FW841	EWR33B-08LST	FLAT WIRE A	
	JT191	EMV7122-004	CONNECT TER	
	JT192	EMV7122-004	CONNECT TER	
	RY901	ESK7D24-2120	RELAY	

⚠ :SAFETY PARTS

■END-092 [E] Power Supply PC Board Ass'y
(Only for Universal Type, Taiwan)



Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R001	QRD161J-105	1M 1/6W CARBON RES	U
	R001	QRD161J-105	1M 1/6W CARBON RES	UT
	R002	QRD161J-105	1M 1/6W CARBON RES	U
	R002	QRD161J-105	1M 1/6W CARBON RES	UT
	R003	QRD161J-105	1M 1/6W CARBON RES	U
	R003	QRD161J-105	1M 1/6W CARBON RES	UT

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E03891-001	TAB	
		EMG7331-002	FEEDER CLAM	U
		EMG7331-002U	CONTACT CLI	U
		EMZ4001-001	TAB	U
		ME11948-01E	WIRE KIT	U
		EMZ4001-001	TAB	UT
		EMG7331-002	FEEDER CLAM	UT
		EMG7331-002U	CONTACT CLI	UT
		ME11948-01E	WIRE KIT	UT
⚠	J001	QMCA003-E01S	AC OUTLET	
⚠	S002	QSR0085-018	SELECT SWIT	U
⚠	S002	QSR0085-018	SELECT SWIT	UT

⚠ : SAFETY PARTS

Accessories List

Symbol No. M 2 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2151ABS	INSTRUCTION BOOK	1		BS
		E30580-2151A	INSTRUCTION BOOK	1		EF
		E30580-2152A	INSTRUCTION BOOK	1		EF
		E30580-2152A	INSTRUCTION BOOK	1		EN
		E30580-2153A	INSTRUCTION BOOK	1		EN
		E30580-2152A	INSTRUCTION BOOK	1		G
		E30580-2151A	INSTRUCTION BOOK	1		U
		E30580-2152A	INSTRUCTION BOOK	1		U
		E30580-2151A	INSTRUCTION BOOK	1		UT
		E30580-2152A	INSTRUCTION BOOK	1		UT
	2	QPGA025-03505B	ENVELOPE	1		
	3	E43486-340A	SAFETY SHEET	1		BS
	4	BT20060	WARRANTY CARD	1		BS
	5	BT-20066A	ECC AGENCY	1		BS
	6	BT-20134	WARRANTY CARD	1		G
	7	ENZ2203-001	SIEMENS PLUG	1		U
		ENZ2203-001	ADAPTOR PLUG	1		UT

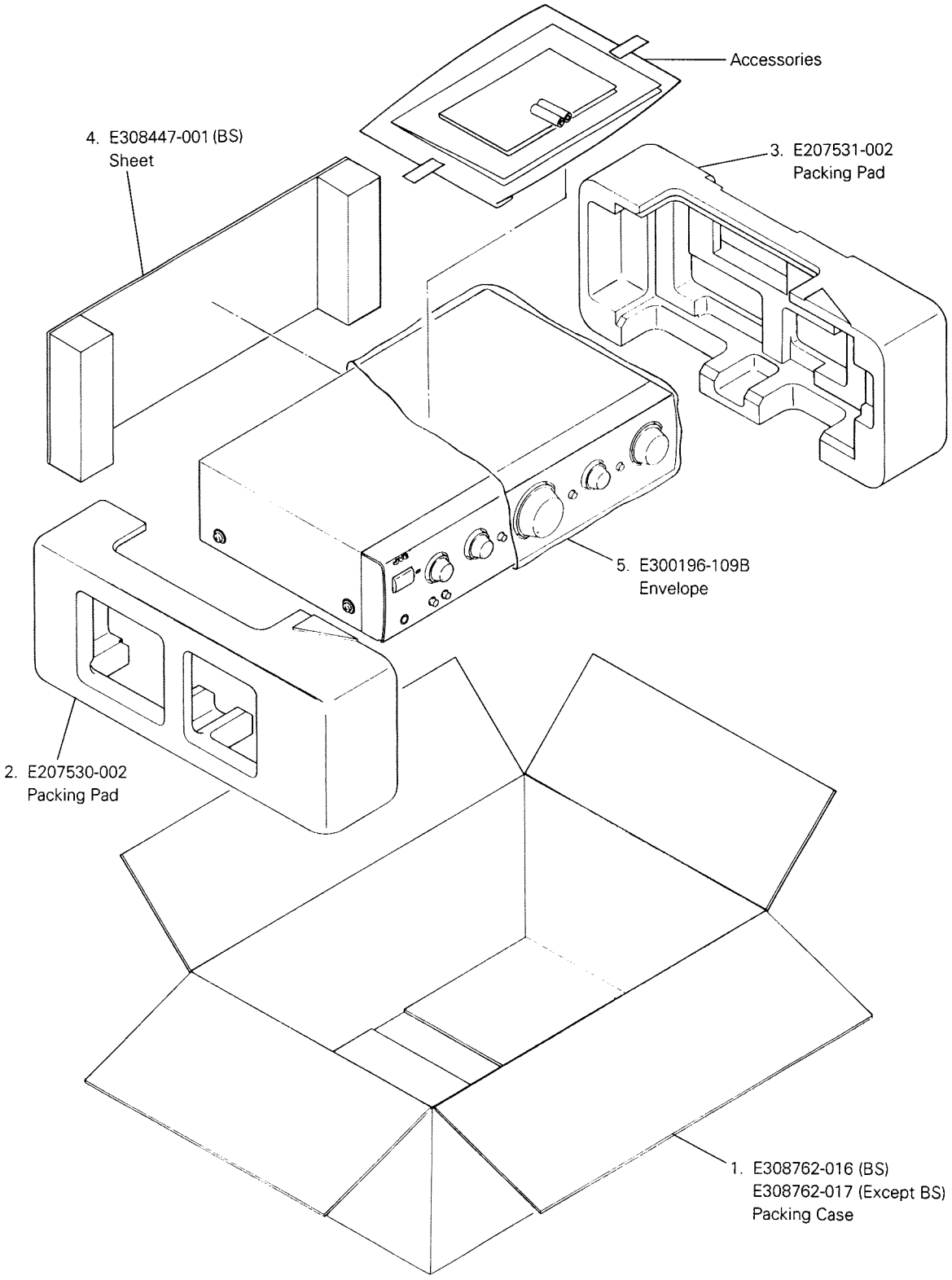
⚠ : Safety Parts

The Marks for Designated Areas

BS .... the U.K. EF ..... Continental Europe EN ..... Scandinavia
G ..... Germany U ..... Universal UT ..... Taiwan
No mark indicates all area.

Packing Materials and Part Numbers

Symbol No. M 3 M M



The Marks for Designated Areas					
BS	the U.K.	EF	Continental Europe	EN	Scandinavia
G	Germany	U	Universal Type	UT	Taiwan
No mark indicates all area.					

JVC

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